

ARCHITECTURE

❖ VOLUME LXIV

AUGUST 1931

NUMBER 2 ❖

Ely Jacques Kahn

By Henry H. Saylor

PERSONALITY is an amazingly complex thing. It is almost never comprehended unless the observer constantly change his viewpoint, viewing the object in the whole round. I should imagine that one who knew Ely Kahn only through his architectural achievements would feel rather confident that the man is an outstanding executive, interested mainly in the doing of big works—an architect of bulk. The number of huge office buildings that he has built within the last five years would lend weight to such a portrait.

Or, another observer, noting the absence of all traditional detail in Kahn's work, and in its place a daring use of abstract ornament, bold color, and the unexpected silhouette, would label the man as a radical modernist who could have neither admiration nor respect for beautiful forms of past epochs.

Both observers would be absurdly wrong, each with a distorted picture of Ely Kahn's personality resulting from assuming the whole on the basis of observation from a single point of view.

Unquestionably it would astonish either of these superficial observers to learn that one of the things nearest this man's heart is archæology. His library along these lines is probably the most extensive in New York, and it is being constantly and rapidly enlarged. And this love of archæology has carried Kahn into devious paths that lead far beyond architecture. The minor arts of Persia beckon him; his personal collection of majolica, early pottery, the more sophisticated porcelains, gives a new vista of the man's personality. Greek ideas, Greek arts, Greek



philosophers, have influenced him deeply.

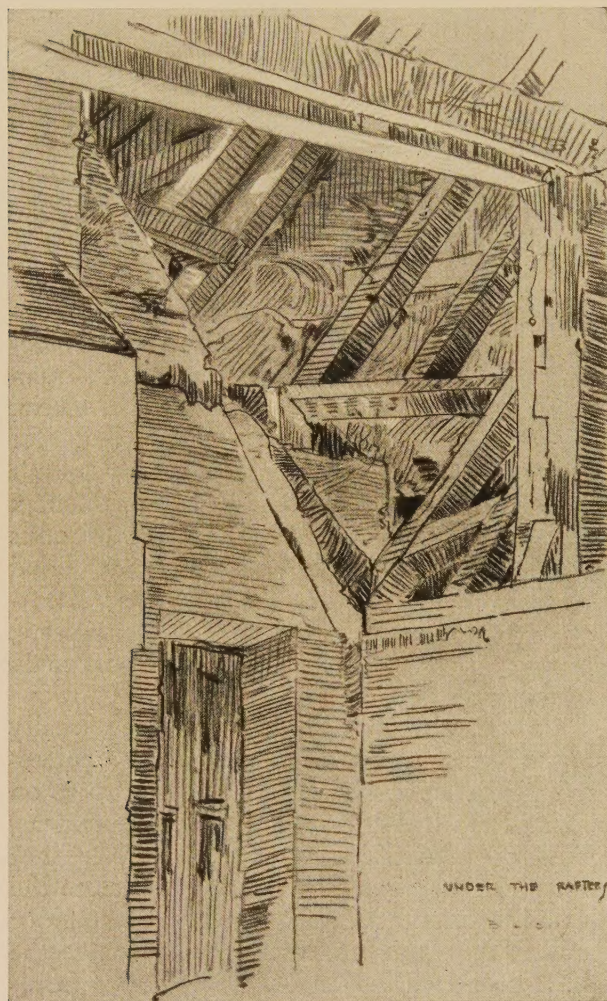
Ely Kahn went from Columbia to the École in Paris and came back an etcher, a watercolorist. For a time he was known in architectural circles as a man who could render presentation drawings, a man to be called in for the special job. Then he taught design for a period at Cornell. It doesn't resemble the picture of the man to-day, does it? But most of us pass through some such period of finding oneself—experimenting, developing one's powers,

tending toward the things one wants most to do and therefore does best.

Apparently, the thing Ely Kahn really wanted most to do was an honest job of architecture. Quite evidently he did not want to go on making beautiful drawings of other men's ideas, for in his work to-day he is the designer—not merely as to general *parti*, not merely as to the plan and mass silhouette, but in every last minor detail of materials, textures, color, even to the fabric which will cover a minor piece of furniture, or a piece of hardware necessary to the full development of a particular scheme.

The question immediately arises: How is such a practice possible in these days when work costing thirty or forty millions of dollars is to be turned out in a twelvemonth? The answer one most frequently hears is, organization and the wide delegation of authority. But the answer is only half applicable in this case. Kahn does not and will not delegate design to others. I fancy one of his greatest dreads is that a flood of work may force it upon him, but he surely will never willingly take that way out. Rather, he uses another powerful weapon. It is almost wholly a

matter of time, after all. If time is dissipated on other matters there is little or none left for personal design. Kahn conserves his time in two ways: through organization and through a developed habit of making quick decisions. The organization is one of long standing. Three of his men have been with the firm for forty-five years; four or five, for twenty-eight years—



A page from one of Ely Kahn's sketchbooks of student days—under the rafters at Blois

much longer than Kahn himself. Before the present year the Firm of Ely Jacques Kahn was Buchman & Kahn; before Kahn's coming it was Buchman & Fox, among whose completed works were one or two of the Centennial Exposition buildings in Philadelphia of 1876.

With the passing of the years this organization has naturally become welded together as an effective machine. There are heads of departments to whom authority and responsibility are

generously apportioned. It is a custom of the office to have weekly conferences at which every uncertain point concerning a particular job is threshed out, a decision reached and put on the records. Through this conference system, therefore, every side of the organization knows at once what decisions have been reached, and why, and carry on accordingly. The system also prevents the stealing of valuable time either in small quantities or large from Mr. Kahn, or any of the department heads, by the constant rain of questions which, without some such weekly round-up, would be inevitable.

S

Again, it is this matter of time—how can the little that is available be conserved and made to count most effectively? Mr. Kahn would probably be the last man to claim that all of his decisions are proper ones, but, right or wrong, they are reached almost instantaneously and pass into the realm of things checked off, and without further power to cause regret.

The architectural practice of the firm has, as in most important offices, attained a certain measure of specialization. Kahn has given his attention to matters as far away from his main line of activities as the design of a private apartment with all of the accessories that go with it, but the bulk of his practice is the design of commercial buildings. It is an essential adjunct of such a practice to know intimately the intricacies of New York real estate—the values of certain key locations, the maximum volume of building that can be put thereon under the present zoning laws, and finally, how such a building would work out in its financial set-up. Having worked out a number of such preliminary problems Kahn immediately recognized the futility of research and study over again for a later client who would be following similar lines of investigation. Thereupon, he established a sort of bureau of research in his own office by which this accumulated data, once having been reached through study and investigation, was filed and made readily available. As a result, to-day a client comes to Kahn, and tells him that he is considering the possibility of putting a loft building on such a location. Kahn touches a button, asks for the dossier of this location, and shows the client at once what the possibilities of the site are, down to the last detail of income



Blois, from one of Ely Kahn's sketchbooks—done in pencil on a gray paper, with water-color washes

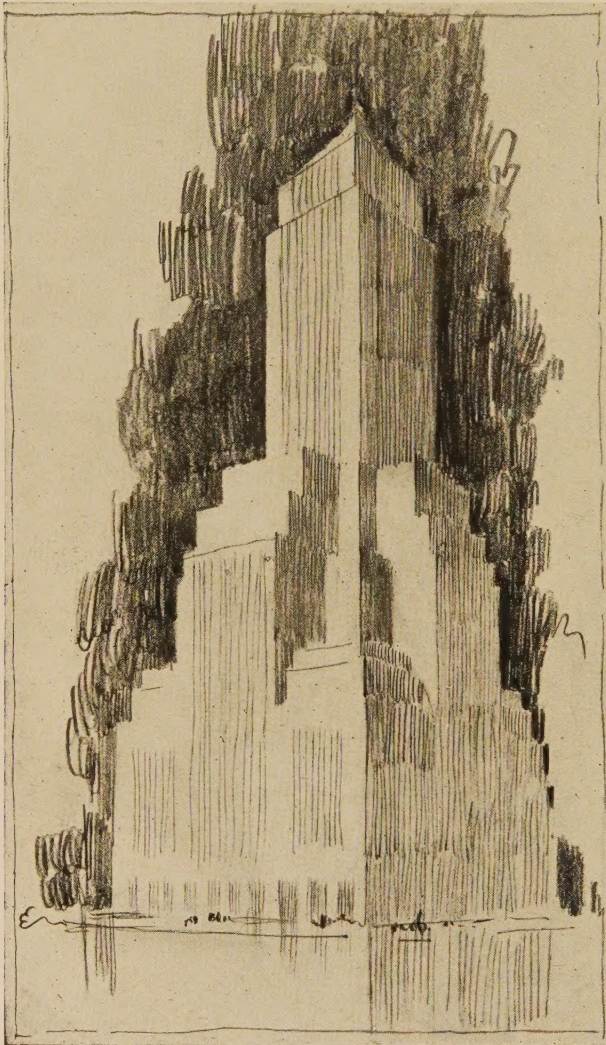


Kahn's facility in indication is well represented by this pencil drawing of Anboise—particularly the children



Blois, in saugre, with a rub of the finger-tips to gain tone

production. The research department, when not otherwise engaged, is developing similar data for other likely and available sites, so that this accumulation is becoming more and more nearly complete month by month. Of course, a similar service, though usually without the architectural development, is becoming more commonly available through the large real-estate brokers, but it



One of Kahn's recent studies of mass and silhouette in a large office building

is naturally an impressive evidence of thoroughgoing efficiency to the prospective client when he finds that most of his tentative problems have already been worked out for him, thus permitting him to make a quick and rational choice.

Ely Jacques Kahn is perhaps generally classed as a militant modernist—one of the group comprising Mendelsohn, Ralph Walker,

Raymond Hood, Dudok, a group which is the pattern of many and the despair of others. The latter group probably regards these men as seekers after novelty, impatient of doing things as they have been done before, reckless adventurers into untrodden paths, without guide or compass—heretics rampant. Yet Ely Kahn and, I feel quite sure, any of the others named have no purpose in their architectural practice that conforms to any such picture. Kahn, at least, since it is he that we are here trying to learn to know, has no patience with either of the two common conceptions of modernism: either a static style of recent creation, or a negation of all that has been learned.

On the contrary, what he is trying to do is just what architects of any epoch, architects who have not been lured into some contemporary blind alley, have probably been trying to do, namely, to devise a structure that fits the needs of those who are to use it and make it beautiful according to the designer's lights. In his efforts to do just this he recognizes, first, the essential necessity of being *en rapport* with all the other arts, drawing upon their store of that which has æsthetic appeal—form, color, all rhythms in which mankind has found and will continue to find pleasure.



He recognizes the fact that in our time the achievement of such a structure has become a far more complex thing than ever before. It is not possible for an architect—or for any single artist—to create a monument of his own powers alone. He must bring into collaboration the work of others, the sculptors, the painters, the landscape men, but first of all the humble craftsmen who must give form and substance to the designer's visualizations. Architecture to-day, as in the days of Le Brun or of Michaelangelo, or of Bulfinch, consists in getting buildings built in accordance with mankind's best knowledge and ability, and appreciation of what is beautiful. The Greeks certainly aimed at nothing higher, nor did the cathedral builders, nor the designer of the Taj Mahal. The results these men produced were utterly different, just as the best we shall do to-day must necessarily be utterly different.

Modern Decorative Light Sources

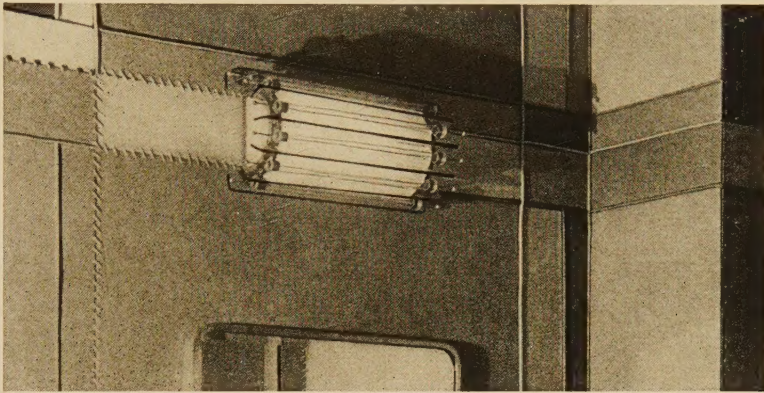
By Eugene Clute

WHAT was until recently one of the least progressive of the arts allied to architecture has suddenly become one of the most advanced—the making of decorative equipment for the lighting of interiors by electricity. “Lighting fixtures” is an inadequate and rather inept term, since it is so closely associated with the kind of chandeliers and wall brackets that did their worst to disfigure the homes and public buildings of the past three

decades; also, since the light sources of to-day are very often recessed in the walls or ceilings or otherwise incorporated in the architectural treatment of the room. Modern light sources bear little, if any, resemblance to the lighting fixtures of even a few years ago, because they are designed for electric light, rather than being mere adaptations of designs originally intended for lighting by candles or gas.

Some of the most interesting developments

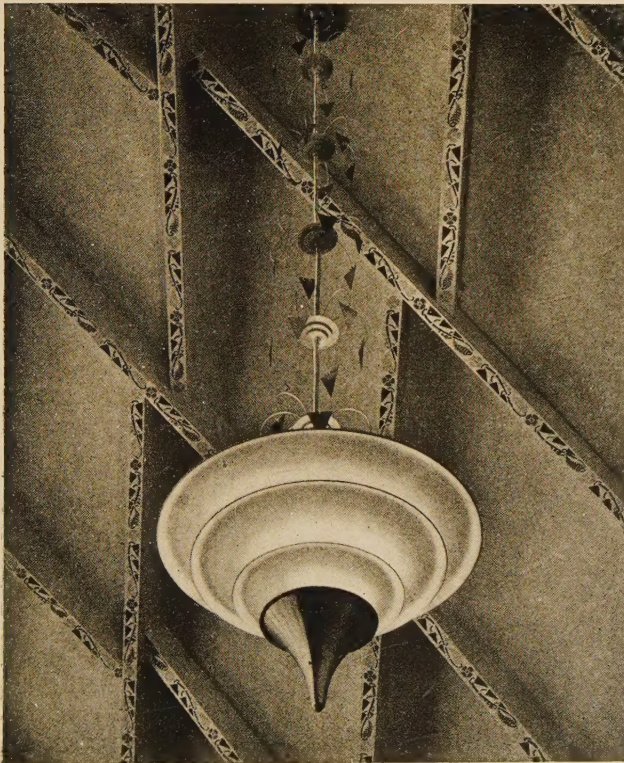
One of the sources in the showrooms of Hollander & Co., New York City, in

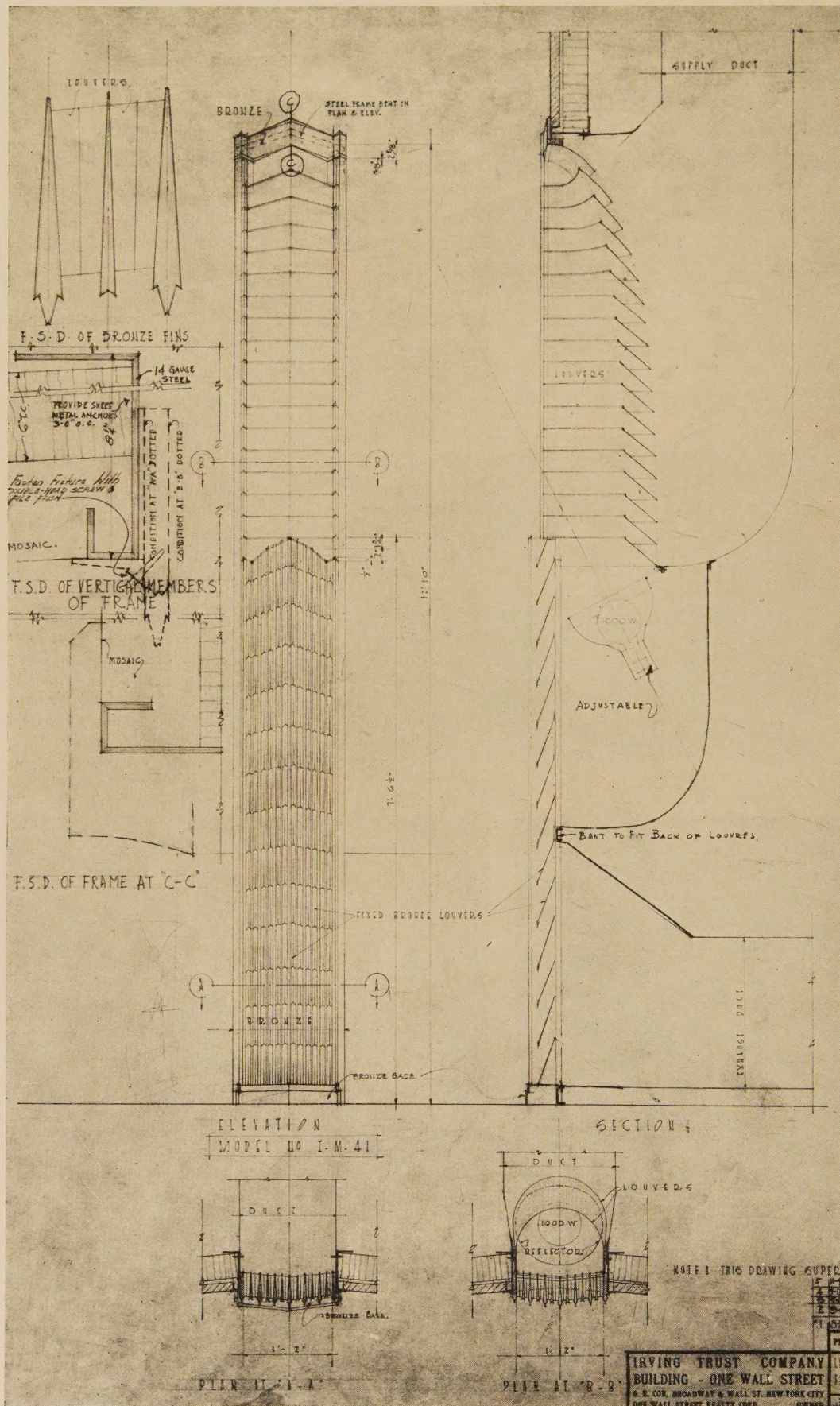


In the Casino Restaurant, Central Park, New York City; of lacquered metal with chromium-plated tip. Joseph Urban, architect; craftsmanship by Cox, Nostrand & Gunnison

which Maurice Heaton has used glass tubes, glass sheets, and a minimum of metal

In the studio of Lucien Tyng, at Southampton, Long Island. Peabody, Wilson & Brown, architects; craftsmanship by Cox, Nostrand & Gunnison





Working drawings of a lighting source with which are combined the warm air inlet and the vitiated air exhaust; see illustration on opposite page

In the reception-room of the Irving Trust Company, One Wall Street, New York City. Voorhees, Gmelin & Walker, architects; illuminating engineering by the Frink Corporation

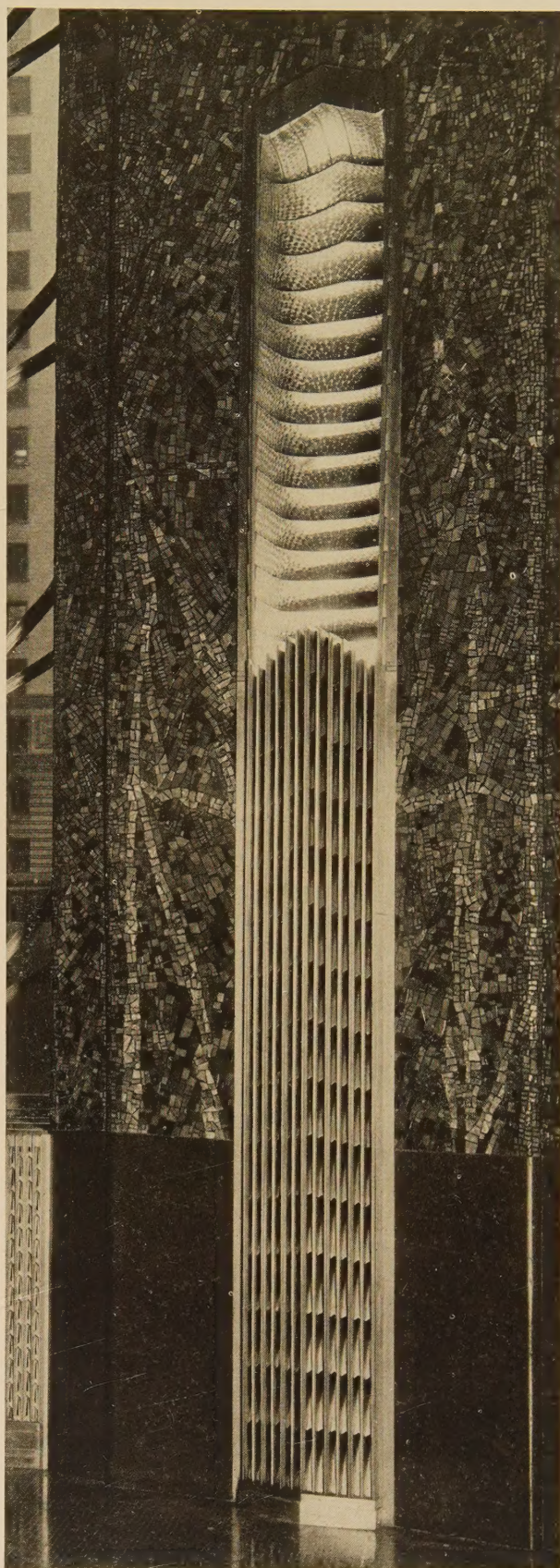
are seen in the light sources just installed in the Irving Trust Company Building, 1 Wall Street, New York City.

The reception-room of the bank, on the ground floor at the corner of Wall Street and Broadway, is a remarkably beautiful room of thoroughly modern design, about 90 feet long, 45 feet wide, and having a ceiling height of 32 feet. The walls and ceilings are covered with glass mosaic in a web-like pattern of gold lines upon a rich red background that grades up to a lively orange-red upon the ceiling. At intervals along the walls are tall, narrow bronze grilles (1 foot 6 inches by 12 feet 10 inches), back of which are combined the heating, ventilating, and lighting equipment, avoiding the disturbing multiplicity of grilles that so often mars the effect of fine interiors. Through the upper part of these grilles warm, fresh air is introduced; through the lower part the vitiated air is drawn out, and about half way up are concealed the flood lights that supply the illumination. These are directed upon the ceiling and are so arranged as to provide a wide and even distribution of light. The design and construction of these units are shown here by working drawings.

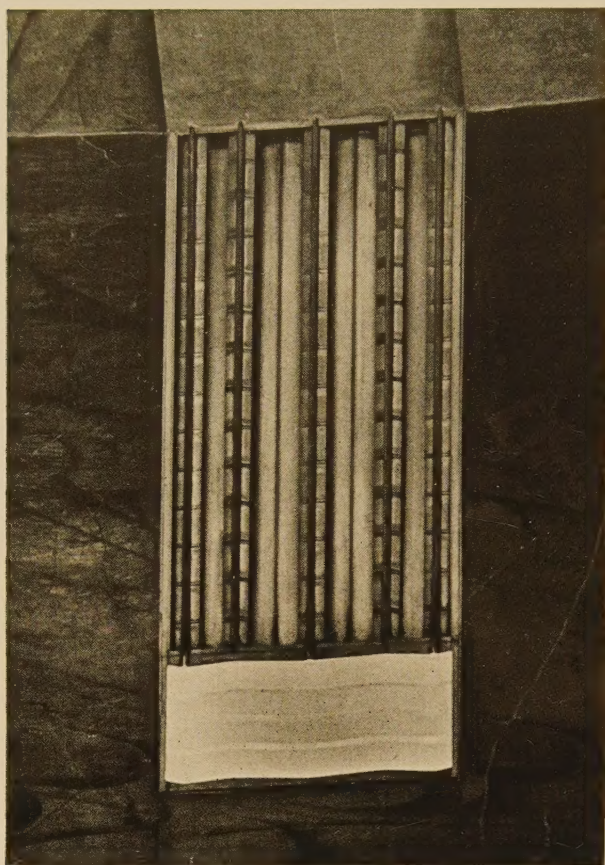
In the main entrance lobby of this building the problem was to supply an evenly distributed illumination and to light a decorated ceiling properly. By reference to the working drawings it will be seen that each light source consists of a reflector unit concealed in the wall back of glass louvers that are set in a bronze frame flush with the marble facing of the wall. The frame carrying the louvers is hinged at the top, for convenience in re-lamping. These light sources are 9 inches high by 1 foot 6 inches wide, spaced evenly on the two long walls, 2 feet 9 inches below the level at which the ceiling joins the walls. The light is projected upward and outward upon the ceiling and is well distributed.

Above alternate light sources and connected with them are the grilled openings of exhaust ducts, for the ventilation and the lighting have been combined here also. The grilles consist of vertical members of extruded bronze of interesting design so arranged in staggered lines that one cannot see into the exhaust ducts back of them (see illustrations on page 74).

Though many photographs and descriptions of the lighting of the grand foyer of the Chrysler Building have been published, the working drawings from which the installation was made have never before appeared. The basis of the scheme is indicated in the diagram on page 75.



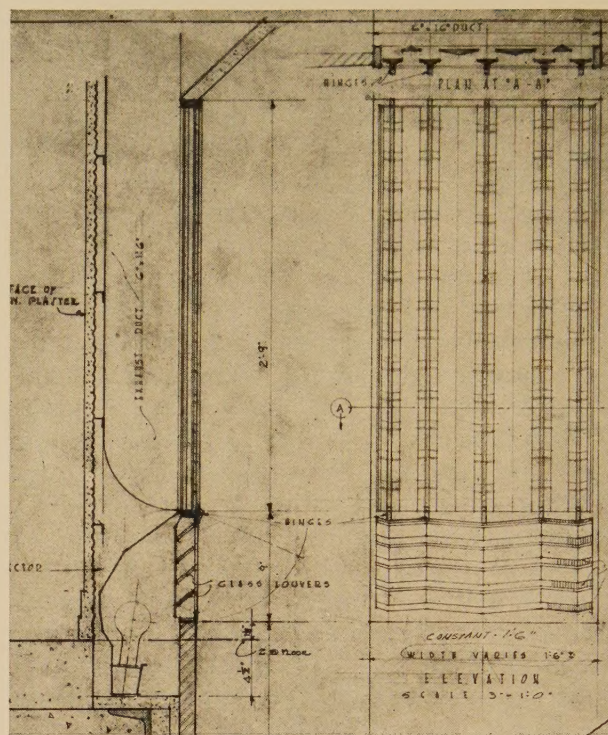
Lighting, heating, and ventilating unit of bronze and glass in the Irving Trust Company's reception-room. See details on facing page



The lighting units are strip reflectors supported in a vertical position a little in advance of reflecting surfaces of honed Mexican onyx that are set in the walls and piers. These surfaces, having a matte finish, do not reflect an image of the lamp filaments, as a polished surface would. They not only reflect but also diffuse the light and they impart to it a slight amber tint to which is added a suggestion of red by reflection from the *rouge flammé* marble of the walls. This color is very pleasant and it is flattering to complexions, a point that should not be disregarded in the lighting of interiors.

Turning to light sources that may be classed as lighting fixtures more properly, though very different from the older types, we find a wide variety of designs, including combinations of glass tubes in various arrangements; combinations of superimposed louvers that take the place of the usual kind of indirect lighting fixture; luminous glass troughs upon the ceiling; and many other advanced types.

Among the most interesting of these are the lighting fixtures in the new showrooms of L. P. Hollander & Company, for the display of women's gowns and other apparel, on East 57th Street, near Fifth Avenue, New York.

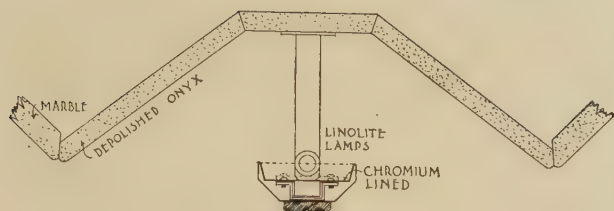


A combination exhaust opening and light source near the ceiling of the entrance lobby of Irving Trust Company Building. Voorhees, Gmelin & Walker, architects. The light is directed upward to strike a decorated ceiling and, indirectly, the lobby below

A simple unit of design is the basis of many of these fixtures—a tube of clear glass through the centre of which is a slender rod, little more than a wire, that holds in place simple metal caps upon the ends of the tube. By combining these tubes in different ways a wide variety of designs is produced.

The great circular fixture in the centre of the ceiling of the main showroom on the ground floor is made in this way. The tubes are arranged to form deep fringes and are hung so that they are free to swing, in order that they may always be plumb. They are illuminated by lamps concealed in a large ring suspended below them, and they blaze with light after the manner of crystal chandeliers.

Elsewhere such tubes are arranged close together in vertical lines upon the wall to form a rectangular mass; again, the tubes are similarly grouped upon the ceiling of an alcove, the ends of the vertical and horizontal groups of tubes coming together upon the angle. Only the thickness of the tubes projects beyond the surface of the wall or ceiling. Through these grilles of glass diffused light pours from lamps concealed in boxes recessed back of them. There are also panels of translucent glass set flush in



the walls in front of recessed boxes containing lamps. In some instances two or three rooms receive light from panels in different sides of the same box. In addition there are fixtures in many different designs in the various show-rooms, notably one in which heavy rings of clear plate glass are used as flanges on a cylinder of translucent glass that is lighted from within.

Indirect lighting fixtures composed of louvers arranged one above another are used in the remodelled and redecorated interior of the Casino Restaurant in Central Park, New York, and in the new section of the Brooklyn department-store of Abraham & Strauss, Inc. In the former the louvers are circular in plan and in the latter they are square. A development of this type is seen in fixtures for the New York Telephone

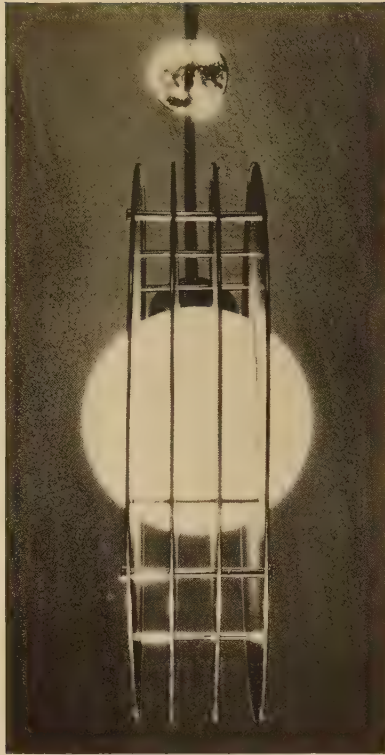
Below, a light source in the Chrysler Building observation gallery. The globe is of translucent glass, the frame of monel metal, the ring of mirror glass. William Van Alen, architect; French & Company, decorators; craftsmanship by Cox, Nostrand & Gunnison



In the Chrysler Building lobby where the light is reflected from large areas (see detail section above at left). William Van Alen, architect; illuminating engineering by the Frink Corporation

Staircase lantern in the Chrysler Building by the same designers and craftsmen; made of nickel silver and moulded glass against Bleu Belge marble. The moulded glass takes a form somewhat like a group of glass rods





At left, in the Daily News Building, New York City. A translucent ball cut by red lacquered discs with bright edges. John Mead Howells and Raymond Hood, associated architects; craftsmanship by Cox, Nostrand & Gun-nison

Another source in the Daily News Building, by the same designers. Of translucent glass cylinders and bronze, over a doorway in the elevator corridor



Company Building, in which the lowest portion is so constructed that it is lighted by reflections from the inside of radiating ribs arranged around it. An elaboration of this idea is seen in the large fixture in the studio for Lucien Tyng, Esq., at Southampton, Long Island, which is highly decorative (page 71).

A very pleasing treatment of the cylindrical lantern type of fixture is seen in the grand staircases of the Chrysler Building. The metal work is of Benedict nickel and the glass is in heavy moulded sections that have the form of groups of round glass bars.

In the observation gallery of the Chrysler Building, on the seventy-first floor, are spherical fixtures composed of curved sections of translucent glass set in Benedict nickel. Each of these spheres is surrounded by a ring of mirror glass that recalls the Rings of Saturn quite appropriately, for these fixtures are seen against a painted ceiling decorated with constellations and signs of the Zodiac in gold on a blue ground.

The Daily News Building on East 42d Street, New York, affords a number of notable examples. The illumination of the grand foyer, or rotunda, is upward from the circular pit in the centre of the floor in which is set the great rotating terrestrial globe that is the chief feature of the room. This light comes from lamps con-

cealed under the steps of heavy translucent glass that encircle the lower part of the globe in the pit. The charts all around the walls have direct lighting from curved reflector strips supported from the wall on horizontal metal arms. In the entrance lobby, to the south of the grand foyer, the illumination is from trough-like boxes of glass, set in bronze and lighted from within, which extend along the centre of the ceiling, and from banks of vertical glass cylinders placed over the doors at the ends of the room. In the elevator lobby the lighting is also from a glass trough set against the ceiling. Smartest of all are the fixtures in the readers' service department. Each consists of a ball of translucent glass (14 inches in diameter) that is intersected by four vertical discs of metal (3 feet 6 inches in diameter) lacquered red and having chromium-plated edges (see illustration above).

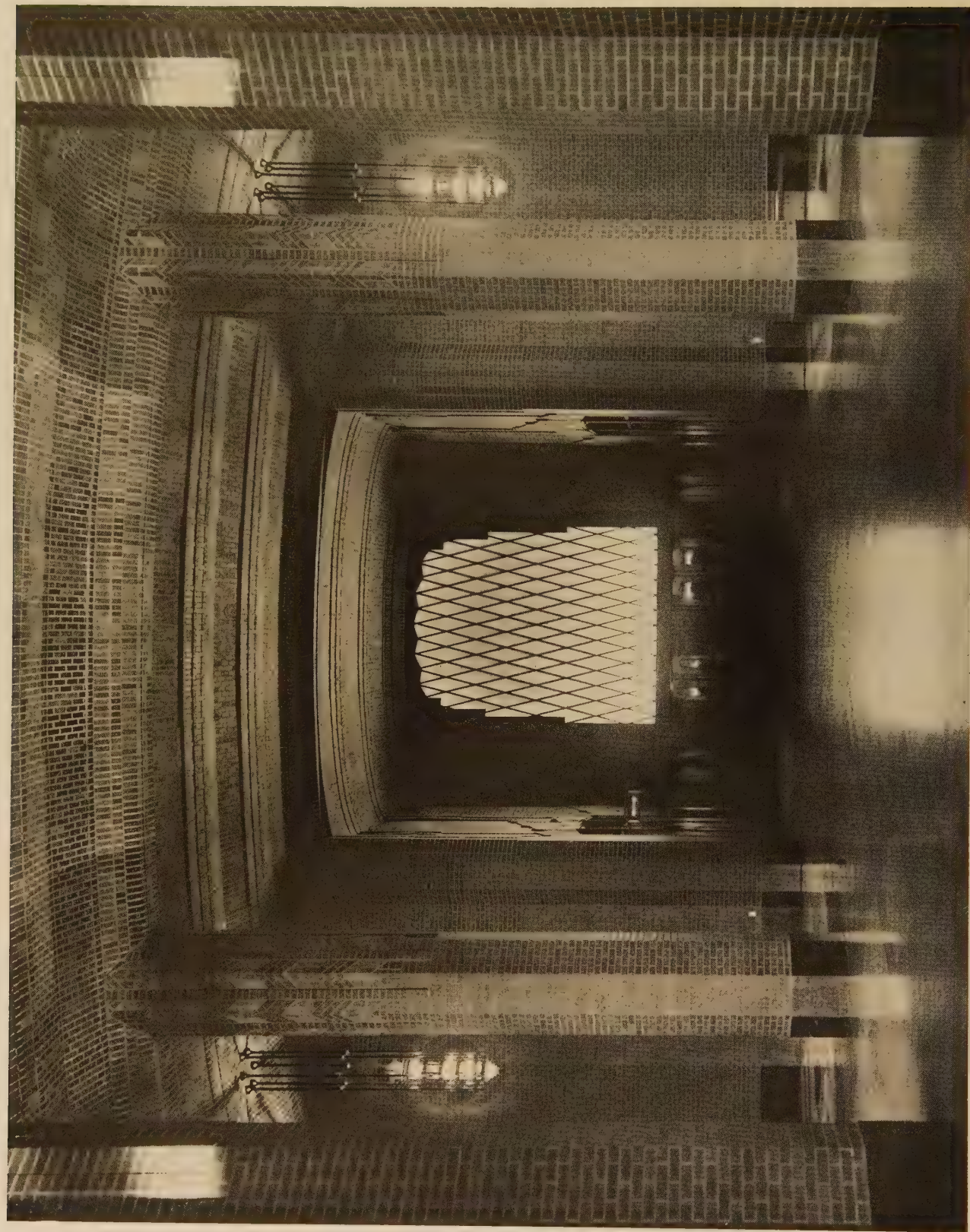
Quite as modern as any described above and especially well suited to form part of the setting for formal social life are the lighting fixtures for those two new smart Parisian hostelries, the Hotel Georges V and the Hotel Principe de Gales. These luminaires are composed of crystal, forged bright iron, and nacrolaque, a composition made from mother-of-pearl in sheets, showing beautiful softly iridescent colors by transmitted light.



Photographs by Palmer Shannon

Detail of the Hudson Street entrance

On account of its great size and its location among other tall buildings, it is impossible apparently to get a satisfactory photograph of the Western Union Building as a whole. It is built of brick, shading through twenty-one color variations from a deep red at the bottom to a light orange at the top. The coping material here shown and throughout the building is of cast stone, the display windows and their spandrels being of bronze



ARCHITECTURE

AUGUST, 1931

The main corridor, looking toward the Hudson Street entrance. Throughout this corridor the same brick as that used for the exterior, in tones, has been employed

28

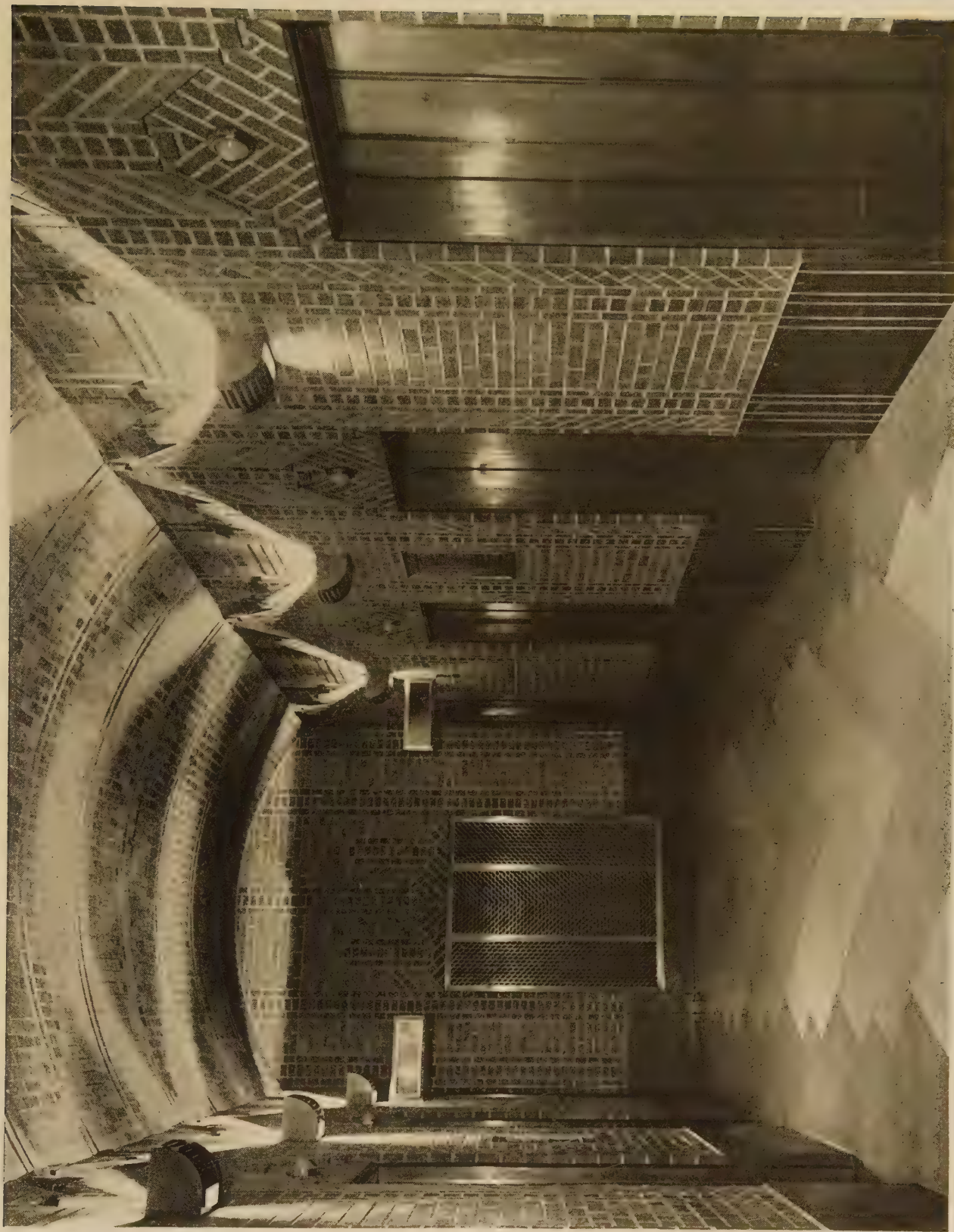
WESTERN
UNION
BUILDING,
NEW YORK
CITY
VOORHEES,
GMELIN &
WALKER,
ARCHITECTS

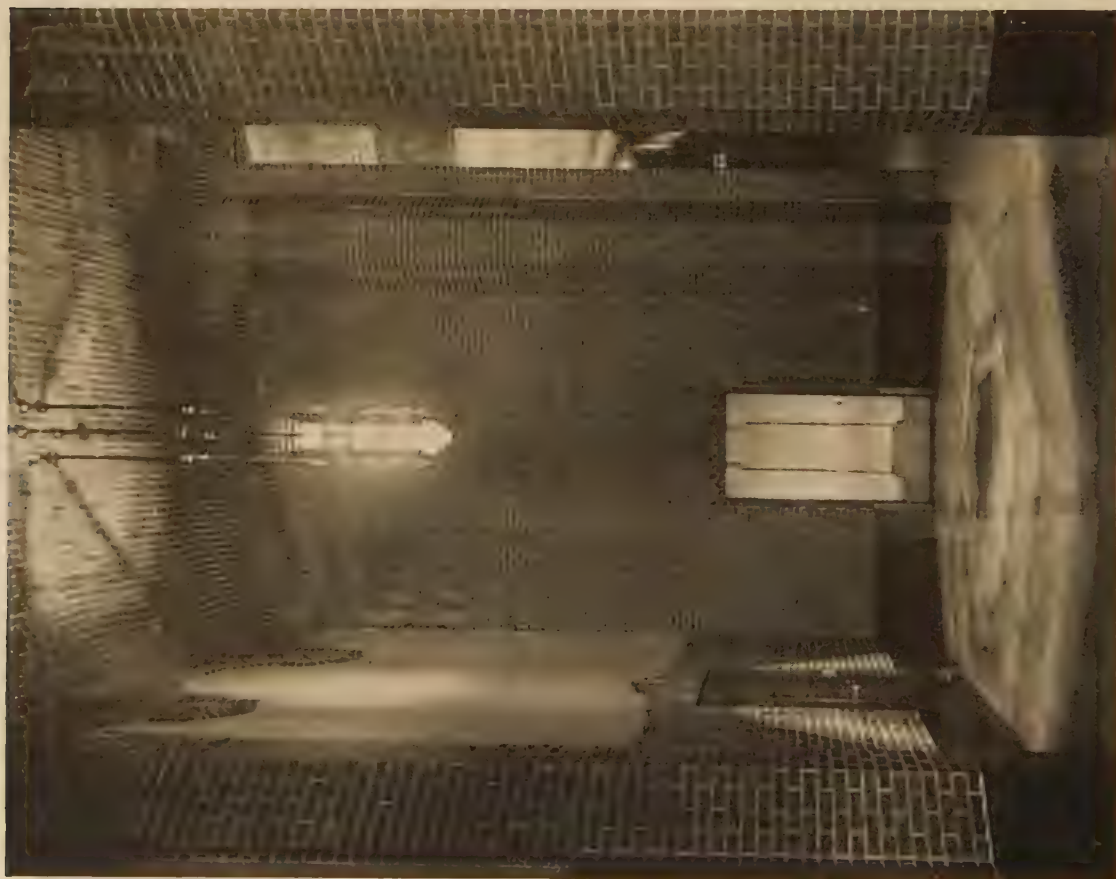
ARCHITECTURE

AUGUST, 1931

One of the elevator corridors leading off the main lobby on the first floor. The floors are of three or four colors of terrazzo; the elevator doors and grilles of bronze

WESTERN
UNION
BUILDING,
NEW YORK
CITY
VOORHEES,
GMELIN &
WALKER,
ARCHITECTS





A bay of the main corridor leading at left to the gallery of the lecture hall



A bay of the main corridor. The plaster wall is later to bear a mural painting

WESTERN UNION BUILDING, NEW YORK CITY

◀ ARCHITECTURE ▶

VOORHEES, GRELIN & WALKER, ARCHITECTS

ARCHITECTURE

AUGUST, 1931

The lecture hall for the use of employees. Acoustical plaster is used on the ceiling, and hard plaster, run in varying planes, on the side walls, all painted a warm gray. There is a loud-speaker opening back of the draperies at the sides of the stage

81

WESTERN
UNION
BUILDING,
NEW YORK
CITY
VOORHEES,
GMELIN &
WALKER,
ARCHITECTS





The cafeteria, with its tile wainscot and acoustical plaster above and on the ceiling

Entrance to a bank from the main corridor



WESTERN UNION BUILDING, NEW YORK CITY

The serving counter room opening from the cafeteria



VOORHEES, GMELIN & WALKER, ARCHITECTS



VERONA

◀ ARCHITECTURE ▶

From the pencil drawing by Vernon Howe Bailey



The new Post-Office, with Power and Garage Building at right, for Minneapolis, which buildings, to cost \$3,250,000, are approaching the working-drawing stage. Magney & Tusler, Inc., architects and engineers



Architectural News in Photographs

At left and right, preliminary perspectives of the War Memorial and Opera House to face the City Hall of San Francisco. Arthur Brown, Jr., architect; G. Albert Lansburgh, associate architect



The City Commission of Newark has approved the drawings for the new Pennsylvania Railroad Station to replace the present Market Street Station. McKim, Mead & White, architects



Indiana University's Union Building, now under construction at Bloomington, Ind., will contain an auditorium, cafeteria, bookshop, faculty club, and many offices. Granger & Bollenbacher, architects



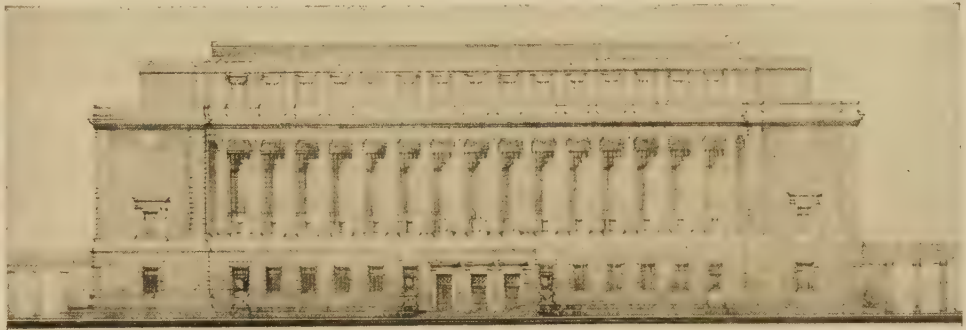


A perspective of the approved design for the United States Marine Hospital in Seattle. Bebb & Gould and John Graham, associate architects



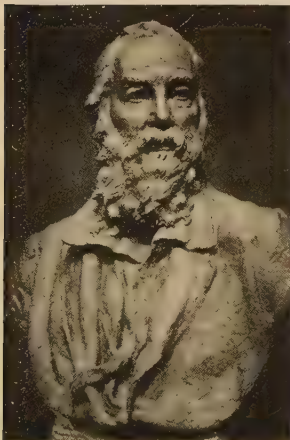
A new unit in the Columbia Presbyterian Medical Centre, New York City, is the Eye Institute of the Presbyterian Hospital. James Gamble Rogers, architect

Edward S. Harkness has given Columbia University the funds with which to build a library facing the present Low Memorial Library. James Gamble Rogers, architect

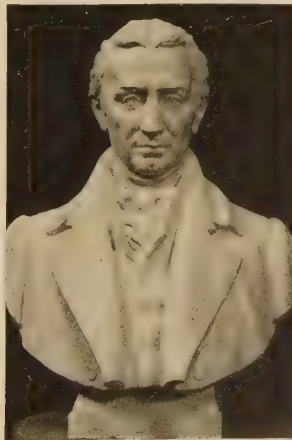


The proposed new office building for the Hartford Steam Boiler Inspection and Insurance Company, Hartford, Conn. Carl F. Malmfeldt, architect

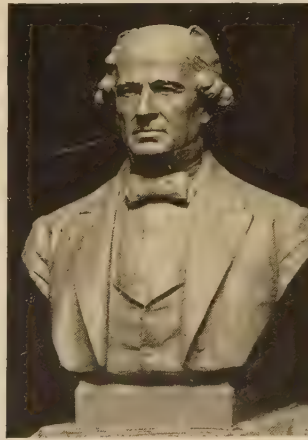
Below, four busts recently unveiled in The Hall of Fame, New York University, New York City



*Walt Whitman
Chester Beach,
sculptor*



*James Monroe
Hermon A. MacNeil,
sculptor*



*Matthew Fontaine Maury
F. William Sievers,
sculptor*

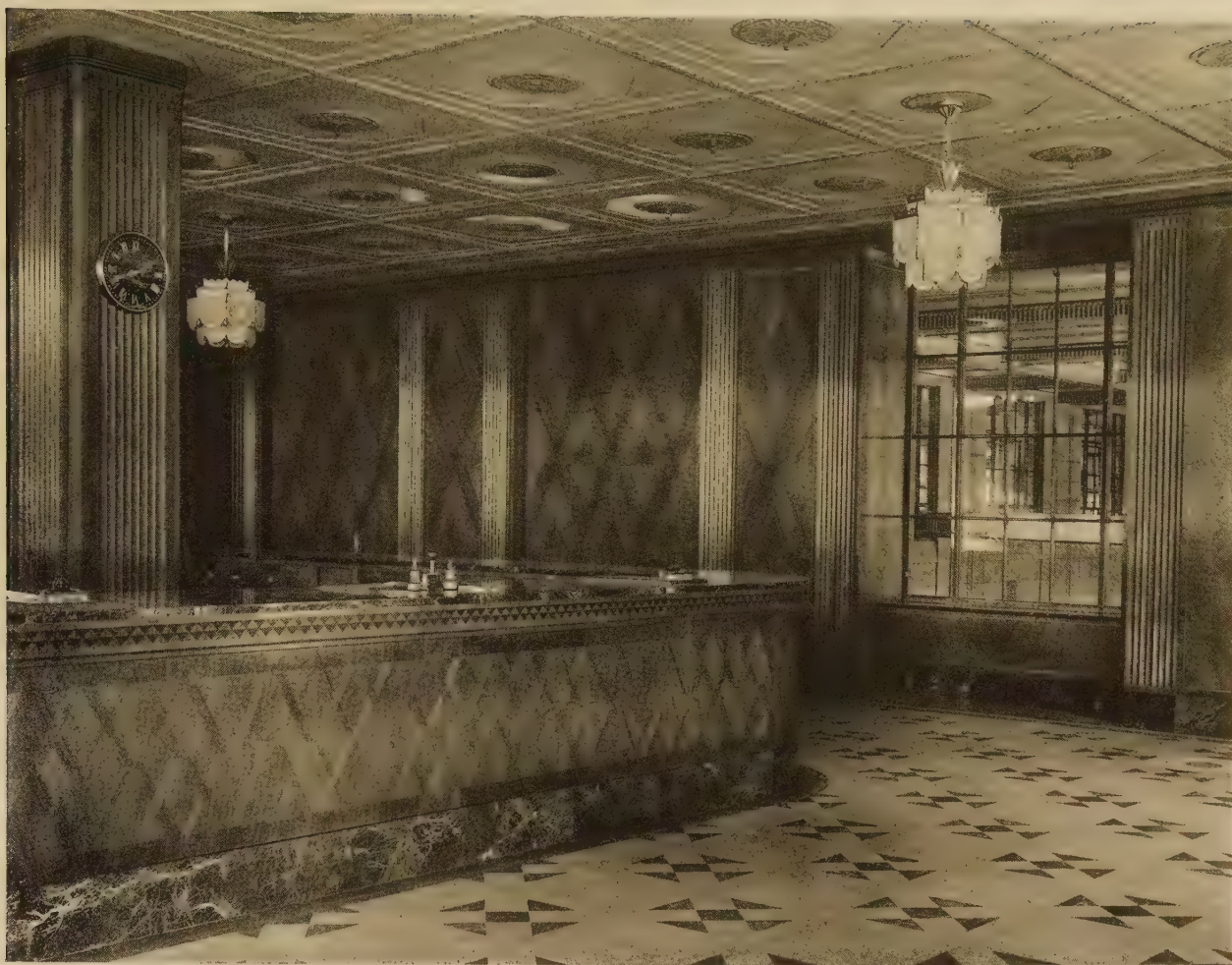


*James A. McNeill Whistler
Frederick MacMonnies,
sculptor*



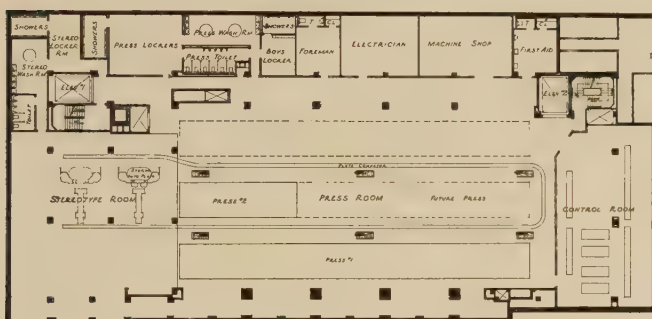
◀ ARCHITECTURE ▶

NOTRE DAME FROM ACROSS THE SEINE
From the etching by Donald M. Kirkpatrick

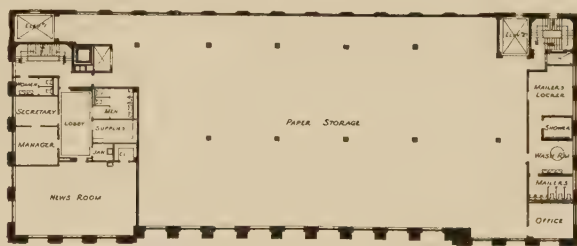


Photograph by Richard Averill Smith

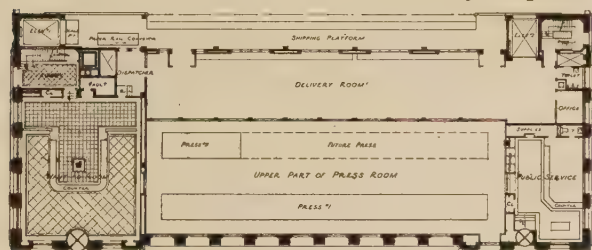
Classified advertisements room



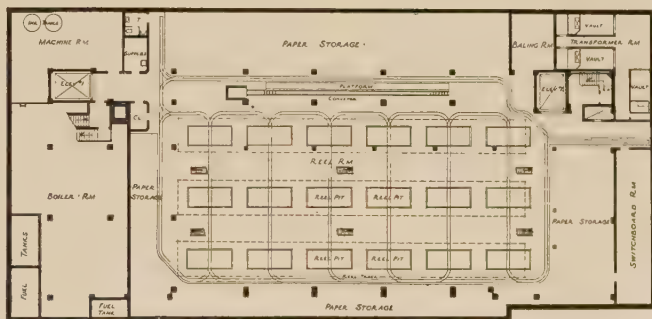
Basement-floor plan



Second-floor plan



First-floor plan



Sub-basement plan

BROOKLYN NEW YORK TIMES BUILDING, BROOKLYN, N. Y.

ALBERT KAHN, INC., ARCHITECTS AND ENGINEERS



Photograph from Bartlett Orr Press

The press room

BROOKLYN NEW YORK TIMES BUILDING, BROOKLYN, N. Y. ALBERT KAHN, INC., ARCHITECTS AND ENGINEERS



Photograph by Ben Judah Lubschez

The architects have carried up through the ribs the limestone used in Goodhue's general exterior, filling the spaces between with tile and marble in varied colors which are, however, toned down to that of the general exterior

DOME, ST. BARTHOLOMEW'S CHURCH, NEW YORK CITY MAYERS, MURRAY & PHILLIP, ARCHITECTS



Photograph by Ben Judah Lubschez

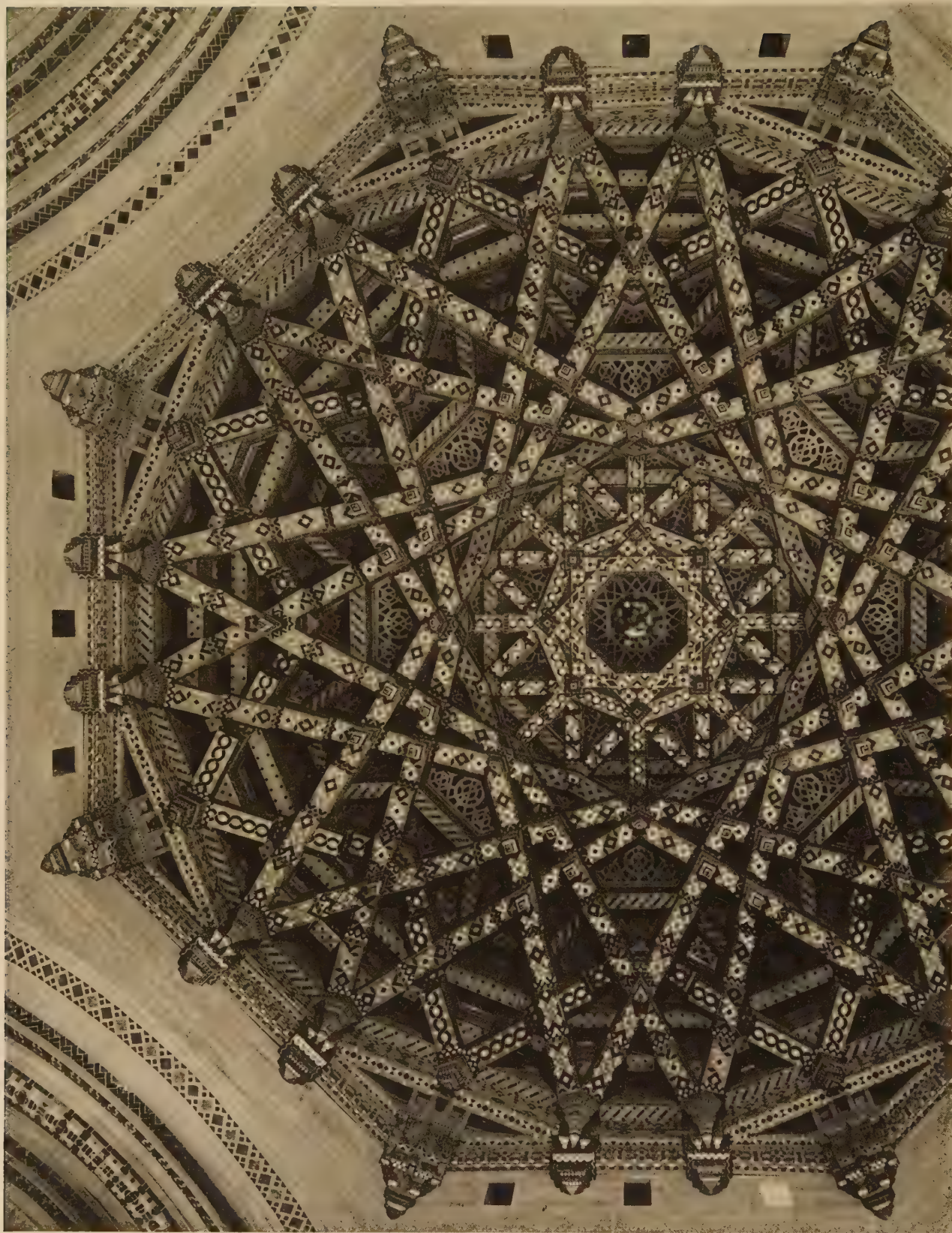
A detail of the dome itself which, in order not to compete with surrounding high buildings, is kept low
DOME, ST. BARTHOLOMEW'S CHURCH, NEW YORK CITY MAYERS, MURRAY & PHILLIP, ARCHITECTS



Photograph by Samuel H. Gottscho

With the completion of the apse and the dome over the crossing, in which there is an organ, the interior of the church may probably be considered finished

DOME, ST. BARTHOLOMEW'S CHURCH, NEW YORK CITY MAYERS, MURRAY & PHILLIP, ARCHITECTS



Photograph by Samuel H. Gottscho

Detail of the organ screen which separates the dome organ from the interior of the church. It is of fire-proofed wood, carrying the coloring and gold that prevails throughout the interior. The craftsmanship is by Eli Berman Company, Inc.

DOME, ST. BARTHOLOMEW'S CHURCH, NEW YORK CITY MAYERS, MURRAY & PHILLIP, ARCHITECTS



Photograph by Samuel H. Gottscho

*Another detail of the organ screen in the dome, showing more fully the corbelling.
Color is secured in these corbels through the use of tile and marble mosaics*

DOME, ST. BARTHOLOMEW'S CHURCH, NEW YORK CITY MAYERS, MURRAY & PHILLIP, ARCHITECTS



Photograph by De Witt Ward

The new bronze doors for the baptistry portal of the Park Avenue front. Albert Stewart, sculptor
 ST. BARTHOLOMEW'S CHURCH, NEW YORK CITY MAYERS, MURRAY & PHILLIP, ARCHITECTS

A Century's Decadence in Lettering

It is interesting to trace the gradually declining taste and knowledge of lettering through this series of memorial tablets, all to be found in Trinity Church, New York City. Assuming that the lettering of the respective tablets was executed at

Obadiah Hunt, from
Birmingham in Warwick
With his Wife Susanna
Credly in Hearisford the
in Oldingland. With for
Children & Grandchildre
who departed this Life
1760. aged 84 Years. and
at y founding of this Chu

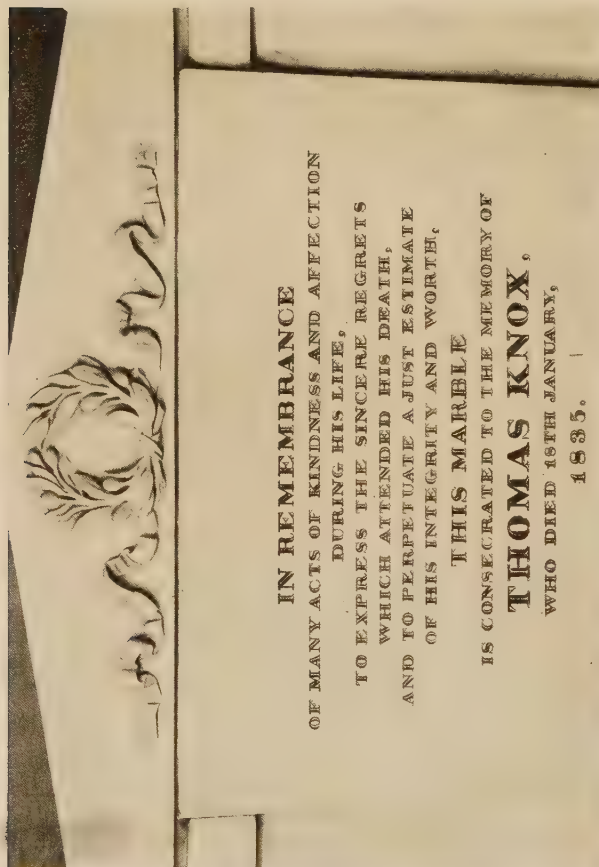
about the dates given thereon, the examples lead from the delicacy and grace of the 1760 tombstone to the final example of 1895, on the next page, which indicates the depth to which the design of lettering may descend

To the Honour of Almighty God
And the Advancement of the Christian Religion
The first Stone of this Building was laid
(On the site of the old Church Destroyed by fire in 1776)
On the 2^d Day of August A.D. 1788.
In the 13th Year of y Independence of y United States of America

Memoriæ Sacrum
IANNIS CHARLTON M.D.
12 April 1736 Obiit 12 Jun. 1806.
Hujus Ecclesiæ
multos annos
omninò diligens. Amicus semper fidelis.
Vir bonus, integer, pius.
CHRISTIANUS
mundo tenebroso edidit suam.
Abi Lector:
Esto talis in vita,
Similis ei in morte evades,
Et gloria sempiterna erit

BENJAMIN MOORE
Born Oct. 16 1748, (old style)
Consecrated
BISHOP OF THIS DIOCESE
Sept. 11. 1801.
Died Feb. 27. 1816.

His remains, together with those
OF CHARITY HIS WIFE,
are deposited in a vault
on the Southern side
of this churchyard.



IN REMEMBRANCE

OF MANY ACTS OF KINDNESS AND AFFECTION

DURING HIS LIFE,

TO EXPRESS THE SINCERE REGRETS

WHICH ATTENDED HIS DEATH,

AND TO PERPETUATE A JUST ESTIMATE

OF HIS INTEGRITY AND WORTH,

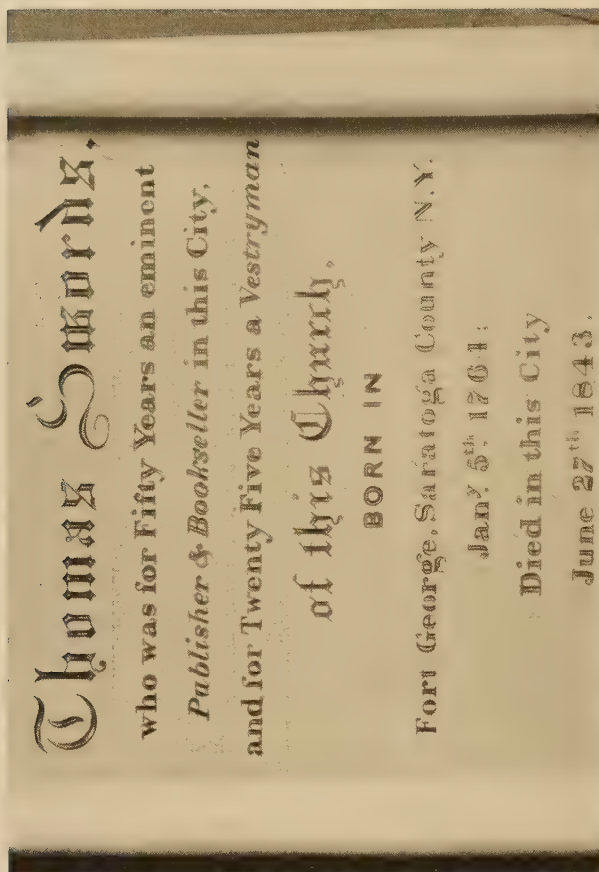
THIS MARBLE

IS CONSECRATED TO THE MEMORY OF

THOMAS KNOX,

WHO DIED 16TH JANUARY,

1835.



Thomas S. Mord.

who was for Fifty Years an eminent

Publisher & Bookseller in this City,

and for Twenty Five Years a Vestryman

of this Church.

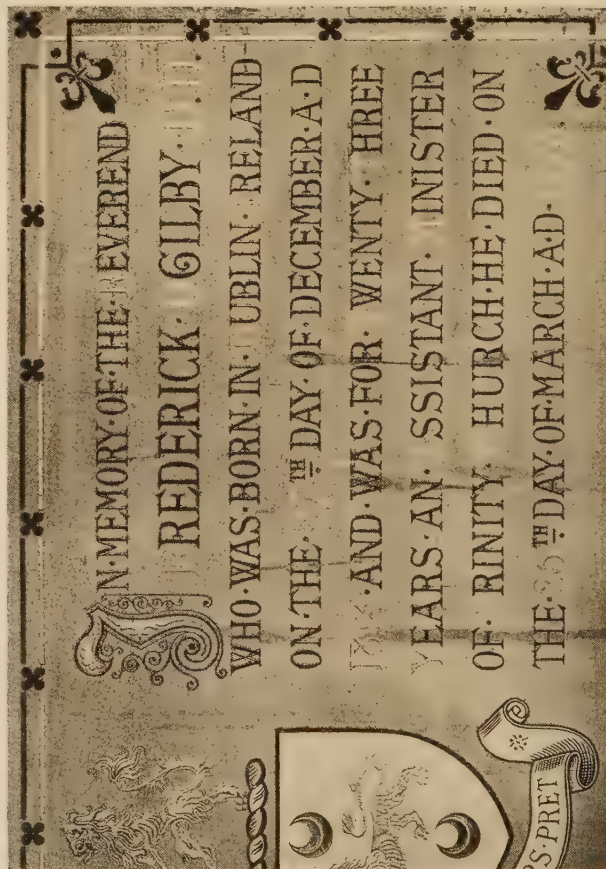
BORN IN

Fort George, Saratoga County N.Y.

Jan^y 5th 1764:

Died in this City

June 27th 1843.



IN MEMORY OF THE EVEREND

FREDERICK GILBY

WHO WAS BORN IN DUBLIN IRELAND

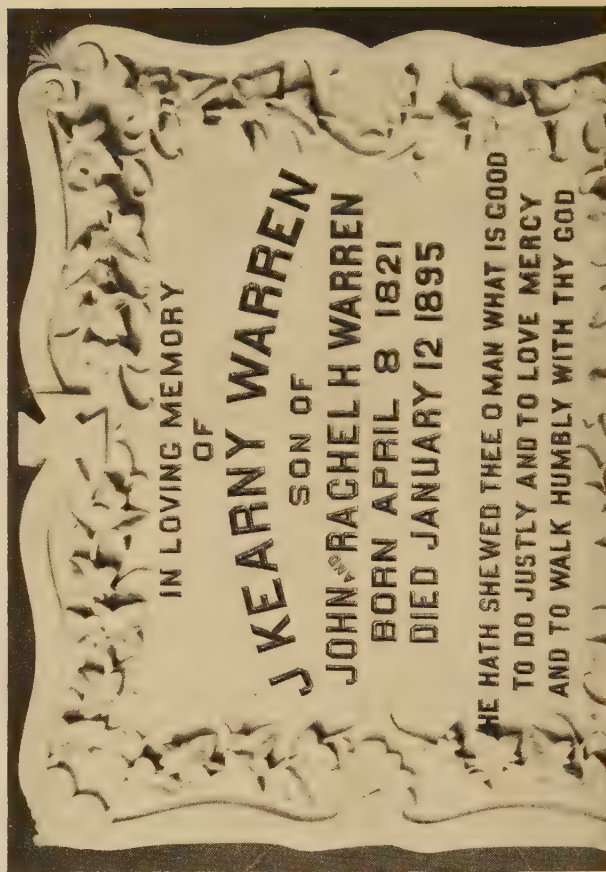
ON THE 1ST DAY OF DECEMBER A.D

1714 AND WAS FOR TWENTY THREE

YEARS ASSISTANT MINISTER

OF RINITY HURCH HE DIED ON

THE 26TH DAY OF MARCH A.D.



IN LOVING MEMORY
OF

J KEARNY WARREN

SON OF

JOHN RACHEL H WARREN

BORN APRIL 8 1821

DIED JANUARY 12 1895

HE HATH SHEWED THEE O MAN WHAT IS GOOD


TO DO JUSTLY AND TO LOVE MERCY

AND TO WALK HUMBLY WITH THY GOD

Some Pitfalls in Supervision

By W. F. Bartels

XIII. PLUMBING (*CONTINUED*)

 IPES for water supply are of steel, wrought iron, or brass. Lately there has come on the market a steel-alloy pipe which is said to be almost the equal of wrought iron in rust-resisting qualities. Brass seems to be superior in general as far as non-rusting is concerned, and while talk may be heard of its high cost, its final cost is only a small percentage more than wrought iron, due to the labor costs being the same. Whichever one is called for, the superintendent should see that no other is allowed on the job. If wrought-iron pipe is to be used it should have the trademark of one of the standard brands rolled in it. Where wrought-iron pipe is called for, it is ludicrous to see a bundle of steel pipe come on the job with a label on which has been laboriously written: "Genuine wrought iron." More often, however, the plumber forgets to bring the wrought-iron fittings to go with the pipe. Incidentally, the substitute fittings are more difficult to detect and more easily overlooked than the pipe. The wrought-iron pipe, being more porous than steel pipe, takes the galvanizing better. Also, when wrought iron is split the rupture will show a fibrous structure as compared to the crystalline makeup of steel.

It is well to check the walls of brass pipe for thickness, to see that it corresponds to that called for in the specifications. Often there will be an attempt to substitute a light-weight pipe for the regular weight. This should not be countenanced, as it will be difficult to handle and will probably break off at its connections should any strain be placed on it. The reason for the breakage here is that there is not enough material left beneath the threading to allow for much strain. Similarly, the fittings should be checked to see that they are in order.

Having satisfied himself as to the weight and size of the pipe and the fittings, the superintendent should see that reasonable care is exercised in installing the brass pipe. The careless use of the Stillson wrench chews the pipe unnecessarily. The wrench should not be used too far from the point where the pipe is held by the vise. In large-size pipe care must be taken not to

crush the pipe, such as by the use of chain tongs. Ordinary brass pipe should not be bent unless it has been fully annealed. To make the joints tight the only thing that should be allowed is boiled oil and a little cotton wicking, which is put on the male thread. No red lead, litharge, or cements should be used, because oftentimes they will give a decided taste to the water. One case is on record where a plumber was sued for a case of sickness because he had used red lead.



The riser lines should be gone over to see that they are of the size called for on the plans. Then the branches, or "Crotons," as the mechanics in New York call them, should be checked to see that each fixture gets its proper size supply line. All this should be done of course before the lines are enclosed by partitions. Then the valves should be looked at to see that they are in and are located in their correct positions. If possible they should be in closets or other inconspicuous places and in no case should they be allowed to project out into a room. The valves are generally furnished to cut off the water supply of one set of fixtures, although in the more expensive type of work a valve may be furnished for each fixture.

No bushings should be allowed in the work to take the places of reducers. No unions should be installed, their places being taken by right-and-left couplings. The latter are difficult for the average plumber to put on and therefore are avoided whenever possible. Where the water supplies run to a basin or lavatory they should be provided with an air chamber, preferably twelve inches long. This will eliminate the knock so often heard when the water is shut off suddenly.

Hot and cold water pipes should be kept at least six inches apart, and the hot-water lines should be covered with an insulating material. When brass water pipes are run in cinder floor fill they should be painted or in some manner protected against the acids which may be in the

cinder fill. In the non-fireproof type of construction the hot-water riser will often have its individual hot-water return. Care should be taken to see that this return is carried down from the highest point served. Often it is cut into the riser at the second floor, thus depriving the floors above of its benefit. When this is done and the building plastered the detection of this fraud is difficult.



When water pipe is cut and threaded there is a burr left on the end by the cutting. This should be removed with a reamer to make a workmanlike job. Particularly is this so in steel or iron pipe, for where left on the burr offers an excellent starting point for rust. If it is a small pipe the whole opening is soon closed up with rust.

In long lengths of hot-water pipe it is necessary to provide expansion joints. It is a good plan to have access doors so that these joints may be reached in case of necessity. However, if a hung ceiling is provided, a swing or loop may take the place of the expansion joint, and then no access door is necessary. This "loop" is nothing more than an offset in the pipe to allow for expansion and contraction without damage. Where a long length vertically makes it necessary to install a loop it can be made in the middle and the pipe held by hangers top and bottom; or a "loop" may be furnished at top and bottom with the hanger in the centre.

Similarly a "loop" should be used on a long horizontal run.

When the water supply system is completed it should be tested with air or water. The latter is really preferable as it will indicate the leaks more quickly. The test pressure should be fifty per cent greater than the working pressure. Care should be taken to see that the cut-out valves are open so that the entire system is being tested. Often if a line is not quite finished a turn of a valve will take it "out of the test" without the knowledge of the inspectors. A gauge will of course be supplied and the indicator should hold steady at the required mark.

If air is used in making the test and the lines are long, it is well to watch the hand of the gauge for several minutes. The pump used will be at the gauge, but there is nothing to prevent another pump's being used on another part of the line to keep the pressure up. The throbbing of the second pump, however, will cause a pulsation of the gauge indicator, thus revealing the deception.

GAS LINES

The gas lines will be tested by the gas company, who use air pressure with a mercury-column gauge. In this test, as in the air test of water lines, a leak is difficult to find. The plumber generally makes a soapsuds lather and applies it with a brush to the suspected leak, which at once reveals itself if covered. Often the specification will call for gas pipes to be painted in some manner, in which case the superintendent should see that this is done.



The maze of piping required for a single bathroom, before it has been hidden by floor and partitions

A six-elbow expansion loop on a hot-water line, the loop encircling the adjoining soil line



Commensurability and Walls

By Ernest Flagg

MUCH has already been said in these articles in a general way of the advantages to be derived from the standardization of parts in building and the dependence of standardization on commensurability in design.

The object in this installment, as it was in the last, is to present a specific illustration of the application of this truth. It is now proposed to consider walls, but before beginning it may be well to state again certain facts which seem so self-evident as to be axiomatic and upon the truth of which our argument rests.

1st: The most effective way to reduce cost is by standardization, or mass production, as it is called.

2d: Standardization of design in house construction is, generally speaking, undesirable as tending toward monotony.

3d: A better way is to standardize parts.

4th: Standardization of parts is dependent on commensurability in design, for otherwise they will not always fit.

5th: Commensurability can best be had by the use of building units or modules.

Now as to walls: Many different

Mr. Flagg's series of articles started in the issue of September, 1930, with "The Basis of Greek Design." Supplementary articles have appeared every other month since that time.



types have been evolved during the ages, suited to different needs, different materials, and different tastes. What is now wanted is a type suited to standardization of parts under modern conditions, or to unit construction, as it may be called.

Some years ago I invented a type of rubble wall which has certain advantages over ordinary rubble. It is made by the use of demountable forms, easy to operate and requiring little lumber to make. By the use of a unit in planning, the forms always fit, no matter how the design may be varied. This wall and the method of making it are fully described in my book "Small Houses." The forms consist of uprights, firmly held in place at top by light frames, and planks to hold the masonry. The

forms are so contrived that the planks can readily be slipped out as the work proceeds and used at a higher level, therefore comparatively few are needed. The face of the wall is formed by placing the flattest side of the stones against the planks, then filling behind with concrete. Pointing is done after the planks have been removed. Figure 1 shows a wall of this kind in process of erection, and Figure 2 is an inside view of the forms. As the work after pointing has a mosaic-like appearance, I called it mosaic rubble. Remarkably beautiful results are obtained with little skilled labor.

Although these forms, in their economy of construction and simplicity of operation, have advantages over any others that I know of, they, like all other forms, have their drawbacks. Comparatively inexpensive, their cost is nevertheless too great for a single operation and their setting requires care and a certain amount of skill. They are intended for, and adapted to, multiple building. When used for several buildings and operated by men accustomed to them they are of considerable value, but for a single house there is little economy in their use. It was to overcome this difficulty



FIG. 1. Mosaic rubble wall in process of erection. The lower part, to just above the small square windows, has been pointed



FIG. 2. Mosaic rubble; inside view of forms, showing the flattest side of each stone placed against the planks forming the outer face of the wall, backed up with concrete



FIG. 3. *A house of mosaic rubble walls with armored quoins. The roof is of slate laid in a manner to be described in a later article*

that I devised the type of wall about to be described.

It came about in this way. In building mosaic-rubble walls I found, as usual in rubble work, the greatest difficulty at corners. Stones had to be cut to obtain a presentable angle, and there were other difficulties, so that one corner cost about as much as ten feet of plain wall. To remedy this I used cast-stone corner blocks, or quoins, as shown in Figure 3, and the better to hold them firmly in place and form a rigid guide for the forms, a large hole was cast in each so that when piled there was a continuous channel from top to bottom in which iron reinforcement was placed, then the hole filled with con-

crete, as shown in Figure 4. This device proved so successful as to suggest an extension of its use to all parts of the wall. Thus an entirely new system of wall construction made its appearance, with results astonishingly economical. The blocks used in combination with brick are shown in Figure 5. Before describing the process of erection it

will be in order first to describe the method of making the blocks.

As the unit in design gives perfect commensurability, stones of few shapes are needed and all can be made in a single box by the use of filler pieces. Inside dimensions of the form or box are 15 inches by 15 inches by 30 inches. It is made of cast iron, machined to exact dimensions, without top or bottom, and has demountable sides. It is shown in Figure 6 with certain of the filler pieces in place. Its cost, exclusive of filler pieces, was seventy-five dollars, and its life is indefinite. I have used mine for several years, and by keeping it oiled it has suffered no appreciable deterioration. Its inner sur-

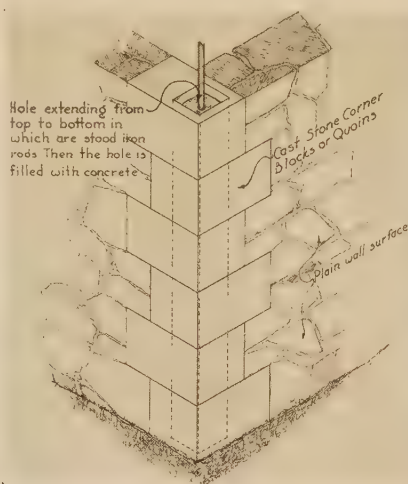


FIG. 4. *Mosaic rubble with construction detail of the armored quoins*



FIG. 5. *Cast stone block quoins and jambs with thin brick wall filling flush with the outside face*



FIG. 6. *The iron box or form used for making cast stone blocks for armored construction*

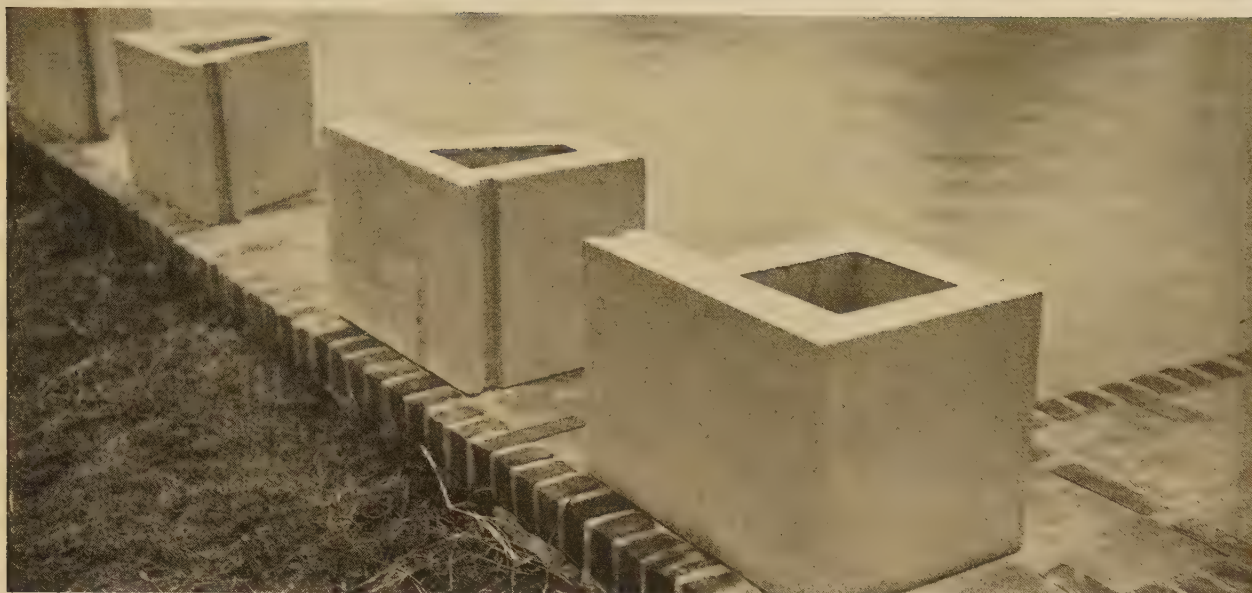


FIG. 7. Cast stones for armored block construction, made of three parts clean sharp sand to one part of white Portland cement, thoroughly mixed, with only enough water to dampen it

faces are perfectly smooth, as are also the surfaces of the blocks made in it. Heretofore the fillers used have been of wood, but they have not been entirely satisfactory because, even though kept well coated with shellac, there is more or less swelling and shrinking. In the future metal filler pieces will be used.

The mixture is three parts clean, sharp sand to one of white Portland cement, thoroughly mixed, with only enough water to dampen it. It is put in the forms in layers, each one carefully tamped by hand. Better and quicker results could doubtless be had by automatic tamping, but even by the hand process two men are able to make from twelve to fifteen blocks a day, or about twenty cubic feet. The blocks are quite as handsome, to my mind, as some varieties of limestone and probably quite as durable. Their cost compared to stone is low and by more efficient methods of manufacture it might easily be reduced by half. The white Portland cement in connection with the yellow sand produces a beautiful warm ivory color which few natural stones can equal. As soon as the material is tamped the sides of the form are removed and the blocks stood aside, each on its separate plate, and allowed to cure for thirty days, during which time they are kept damp. Figure 7 shows blocks of different shapes. The one in the foreground is a corner stone, the filler pieces for which are shown in place in

Figure 6. The one beyond is for a splayed window-jamb.

In an ordinary house from eight to ten different shapes are required, all made as stated in the one form.

Now as to construction: The houses are without cellars, and the first operation after laying out the work is to build the foundation. Where there are no foolish building laws to interfere and the wall is low, a trench is dug, on the line of the wall, about one foot wider than the wall and filled for eighteen inches with cinders well tamped. Then, centred on this cinder bed and using planks for a form, the foundation course, of the exact thickness of the wall, is made of concrete. In this connection too much stress cannot be laid on accuracy, for any time or trouble spent here will be most amply repaid by subsequent speed and satisfaction. Great care is taken to make the top of the planks which act as the form for the concrete base perfectly level and true. This foundation course is one foot high—six inches above grade and six inches below it.

If the finished floor is to be of linoleum cemented to the concrete floor slab, then the top of the foundation is at floor level, but if a wooden floor is to be used, then it is two inches above the floor slab to allow for the thickness of the floor and the one-inch sleepers to which it is nailed. When this foundation course has been finished and trowelled per-

fectly true, smooth, and level, it is covered with a damp-resisting compound on which, as an additional precaution, is laid a strip of rubberoid of the width of the wall. Then all is ready to proceed with the superstructure.

Work commences by piling corner blocks to the full height of the story, great care being taken that corners are exactly the right distance apart and perfectly plumb. These corner piles serve as guides for the intermediate ones and by sighting between them the slightest deviation from the true can be detected.

It will be seen by reference to Figure 5 that the wall consists of piles of blocks, one at each corner and one at each side of every door and window. If there are any long unbroken stretches of wall, intermediate piles are placed at suitable intervals. If all has been properly prepared in the manner described, two laborers under a competent foreman can easily set up the blocks for one story of an ordinary house in a day, or in far less time than would be required for the erection of the simplest kind of forms. The reason for this speed is that the stones are all of exactly the right size and that no mortar in the ordinary sense is used in the joints. The blocks are simply placed on top of each other, work which can be done by common day laborers under the guidance of a competent foreman quite as well as by the most skilled stone mason. I

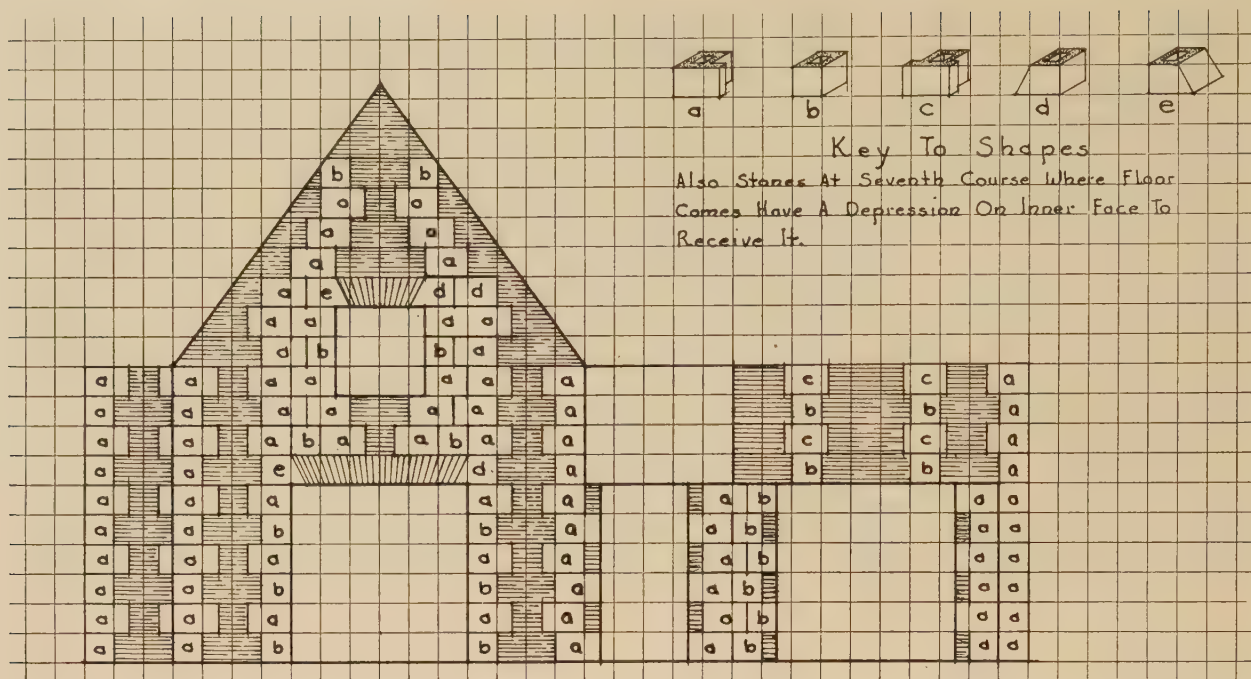


FIG. 8. A setting diagram for armored block construction of a façade, as indicated very quickly on the special tracing-paper printed with red lines, the squares representing fifteen inches on a side, the unit of wall thickness

say no mortar is used, in the ordinary sense; that is to say, no mortar which affects the thickness of the joint, but before one stone is placed on another the top of the under one is covered with a mixture of Portland cement and lime of about the consistency of thick cream. This has the effect of filling any irregularity, no matter how fine, in the stone beds and making them water-proof. Vertical joints are keyed or sealed by grouting the channels cast on the blocks where they meet, as shown in Figure 7.

It will be seen from this same figure that corner blocks have a tail piece on one side only, about three inches thick, with a groove in the end for the key just mentioned. In the next course this stone would be reversed so that from the outside the stones are alternately long and short as shown in Figure 5, but inside they appear as straight piers. The brickwork filling between these piers consists of only four inches of brick, damp-proofed on the inside and coated with a half-inch of cement. The blocks are so beautiful as to make it practical to leave them exposed on the inside as a part of the interior decoration. Recesses between piers can be filled in, furred off to form pipe chases, left for use as bookcases, cupboards, or simply as

FIG. 9. Below, armored blocks in the fifteen-inch cubes are useful for other purposes, such as fence posts, supporting piers, and the like



recesses, adding just so much to the available size of the room. By this means about one-third of the masonry otherwise required is eliminated, while a stronger wall is obtained. This type of construction is particularly suited to places subject to earthquakes, as California for instance, because, fastened together as they are by the iron rods and concrete core, no amount of shaking can dislodge the blocks. The construction may be likened to that of a bird cage which no shaking will affect, whereas if built in the ordinary way it would be like a house of blocks which at a slight movement collapses.

In using this method it is of course necessary that the placing of the various shaped stones be carefully worked out and clearly indicated on the elevations, but after a little practice this can be done very rapidly. The different shaped stones, of which there are few as stated, are each given a number or a letter which is marked on the elevation. Figure 8 represents one elevation of the house under consideration with the blocks numbered; each number representing a particular shape.

These blocks are useful for other purposes, as fence posts, supporting piers, and the like. Figure 9 shows them as angle posts of a grape-arbor.

Friday, May 22.—Almost from the moment we left the pier yesterday at four P.M. we have moved slowly through a thick fog, probably engendered through the meeting of Traditionalists and Modernists who dwell in this world at widely differing temperatures. Not that there is any discussion of either subject; far from it, for, between the foghorn blasts, coming every minute, on the minute, the talk is of almost everything but architecture—of Paris and how to make the most of our fifteen days there, of those who should have been with us and are not, of committees and what is expected of them (which seems to be a great deal).

Saturday, May 23.—It was a fond thought of mine before embarking on this trip that the eight days at sea, both going and returning, would at least be free of all responsibilities in connection with periodical publishing. Here at last should have been a rest—well earned, I insist. But no. Instead of a monthly I am now editing a daily, nor are the news-gathering and writing the whole of it, for I must even type-cut the stencil from which it is mimeographed. It is permitted that Guest Editors be drafted into service, so the following are going to be largely responsible for the next few issues: Edgar Hay, Hubert Ripley, Kenneth Murchison, and Louis La Beaume.

Monday, May 25.—Tournaments are in progress on all sides—bridge, shuffle-board, deck tennis, deck golf, and "Camelot." C. C. Zantzinger (pronounced "Zahn-zahn-zhay" on this trip) and Ethan Allen Dennison are revealed as dazzling comets at deck tennis, N. C. Wyeth is disclosed as a past master of shuffle-board, while Hubert Ripley broods over the bridge table like an all-wise Buddha. Ely Kahn is in a class by himself at "Camelot," having brought the game with him, and being the only one on board who knows the rules. When he does not know the rule he makes one.

Tuesday, May 26.—Apparently this holiday idea was wholly misleading. The "Muriel" painters, as Ken Murchison calls them, have undertaken the decoration of the Lounge and Bar, rooms which had conveniently been lined with ivory wall-board panelling. Arthur Covey, C. Putnam Brinley, George Wharton Edwards, Philip H. Chadbourn, James Monroe Hewlett, Ralph Gray, George S. Idell, C. Howard Walker, and Arthur Ware are busily engaged upon their respective panels of the Lounge, while Tony Sarg transformed the Bar by painting ten superb panels in a single morning.

Wednesday, May 27.—Unable to wait until the usual evening for the concert, the talent insisted upon giving it last evening under the chairmanship of Wil-



The Editor's Diary

liam H. Gompert. "Songs of the Sea" were sung, with pantomime, by Harry R. Burt and Arthur Ware; Mott B. Schmidt sang "My Wild Irish Rose," assisted by a group of fairies; Tony Sarg wielded his marionettes; Arthur Ware, in the garb of Lord Dundreary, recited "Two O'clock in the Tenderloin"; Harry Burt entertained with *legerdemain*; and there followed a melodrama in one act, "The Triangle," written apparently while it was being performed, by Murchison, Foster Gunnison, A. J. Raspetti, Philip Chadbourn and George Harvey. The "Star-Spangled Banner" was followed by several earnest efforts to sing "La Marseillaise" in French—not wholly successful.

Friday, May 29.—Between the final rounds of various tournaments I managed to steal time for an hour or so with Ely Jacques Kahn, drawing from him the essentials of his philosophy of architecture and how he tries to achieve it, most of which will be found in another part of this issue.

Soon after lunch we ran into heavy weather on nearing the channel, and before dinner were slowing down under a full gale from the port beam. With all of the driving rain and heavy seas the finalists in the shuffle-board tournament succeeded in completing their match on the upper deck with a score of 98 to 102, the victors coming down in clothes that were almost as completely soaked as the decks.

Saturday, May 30.—Soon after nine A.M. we steamed into Cherbourg, went ashore in a lighter and, after a few moments with complaisant customs officers, disposed ourselves and our luggage in a new train. It had been designed for the State Railways by M. Pacon, an architect, who had come down from Paris with several other *anciens* of the Ecole to bid us welcome to France.

Soon after six o'clock we rolled into the Gare St. Lazaire to hear the welcome of some three hundred students in the eternal words of *Les Pompiers*, accompanied by their own band. The station rang with the vociferous welcome, the explosions of flashlights, and the almost

equally noisy reunions of the Voyageurs with Raymond Hood, Ernest Peixotto, William F. Lamb, Simeon Ford and others who had come to see that our entrance into Paris should be made unmistakably hospitable. On the students' tallyhos, in buses, and on foot, the procession and its band made their leisurely way through Parisian traffic to the Café des Deux Magots on the Boulevard St. Germain. Here the regular patrons graciously gave way before a demonstration of affection for the *anciens* that surely had never before been equalled in the Quartier.

After rounding up the luggage and disposing it properly at our two hotels, The Madison and The Palace, both on the Boulevard St. Germain, hard by old St. Germain des Pres, the party resolved itself into units of varying size and disposition to seek what might be found in our first night in Paris. Far into the night one encountered groups of two to five making their way between Le Rotonde and La Dom, and other lesser lights of the Montparnasse firmament.

Sunday, May 31.—This afternoon with Putnam Brinley, Arthur Covey, Monroe Hewlett, Ely Kahn, Louis LaBeaume and W. H. Parsons to have a preliminary glimpse of the *Exposition Coloniale*, out near Vincennes. Some of the thatched-roof buildings, representing Togo and Cameroun, seemed of particular interest—the work of an Ecole man, L. H. Boileau, who, whether or not he captured the spirit of the native architecture, displayed a convincing knowledge of design and a pleasing use of unusual materials.

Monday, June 1.—Parisians tell us that they have had rain for several months—to-day a fair sample of it, like a showery day in April, interspersed with sunshine. It was not enough to keep me from tramping miles of circulatory inspection over on the right bank, finding most of the familiar landmarks unchanged, but with a profuse representation of modernized shop fronts in the shopping district. Three years ago the contemporary manner had made only an occasional appearance in a rebuilt front; now it is far more in evidence—rarely as a whole new façade, but usually a new flowering of the street level alone, with plenty of applied metal, bizarre block lettering, and more daring color.

Tuesday, June 2.—Practically the whole party, numbering fifty or sixty, piled into char-à-bancs and motored out to Fontainebleau, where Welles Bosworth, supervising the various Rockefeller restorations in France, and the architect in charge of the work on Fontainebleau itself, showed us what is being done. Most of us found of particular interest the very tiny theatre, seating possibly one hundred fifty per-

sons, where the musicians' pit and the orchestra had been much subordinated to the main gallery, with its anteroom and rich embellishment. Here sat the Court, with retainers below and above in much simpler and less luxurious surroundings.

Before returning, Bosworth took us to Courance, a smaller and more intimate Fontainebleau, owned and used by the Marquis and Marquise de Gannay. The grand stairway in the entrance court, quite similar to that at Fontainebleau, seemed even finer and more restrained. And though flowers are grown here only with difficulty, through some climatic quirk of the location, the gardens themselves, depending largely upon water motives, are superb.

On the way back to Paris we again stopped for a sip of champagne, tea or what-will-you at the villa of Amos A. Lawrence, an American-born architect *diplomé* who has retired from practice, and who finds vent for his inclinations in design in his own villa. Here are gardens with no lack of flowering color, great trees and lovely vistas over the brown-pink village roofs, with interiors containing a rare collection of Louis XV and Louis XVI furniture, tapestries, and minor bits, all assembled with surpassing skill and discretion.

Wednesday, June 3.—At the Grand Palais there is a good showing of the artiste decorators—a better showing than in the now historic Exposition of 1925, in the opinion of several who have seen both. Great ingenuity in form, materials, and texture marks the minor arts of decorative glass, silver, textiles, book-binding, and the like, but to my thinking the furniture shows too obvious a striving for form for form's sake. Sideboards might be mistaken for catafalques; chairs are either ponderously heavy or structurally frail. The function seems to have been almost ignored in the effort to use beautiful woods and polished metals to compel attention.

After a few of us had lunched on the lovely terrace of the *Cercle Interallié* (formerly the Rothschild residence), shielded from the Champs Elysées and Avenue Gabriel by its great trees and border planting, the party arrayed itself *en fête* and was received at tea by Ambassador and Mrs. Edge in the Embassy which the late Ambassador Herrick and finally our Government had purchased as a fitting home for our representatives in Paris.

Thursday, June 4.—The chief purpose of our pilgrimage to Paris was achieved this morning when the whole delegation, again arrayed as the lilies of the field, marched in a body to the Ecole des Beaux-Arts and formally presented the flagpole which Frederick Hiron had designed as a tribute from *les anciens Américains* to their French Alma Mater.

A preliminary event of becoming fitness was our march through the Cour du Murier where, passing before the memorial to those of the Ecole who died for France, each of us laid a simple bunch of wild flowers upon its base. Thence to the inner garden where the flagpole, but for its new polished granite of warm gray and the brightness of its bronze, might have been standing for years. After an address of welcome by M. Albert Besnard, former head of the Academy of Rome, Clarence C. Zantzinger made the presentation address in the polished French for which he is so well known, and M. Petsche, Under-Secretary of State, representing the Ministry of Fine Arts, formally accepted it. In a solid mass, filling the adjoining court, the student body, with cheers and the recurring song of *Les Pompiers*, voiced its own special approval. We had brought only the Tricolor of France to fly from the pole, but the Ecole officials insisted that the Stars and Stripes must rise beside it, so the two flags were raised simultaneously, the Tricolor by Julian Levi, the Stars and Stripes by M. Bommier, Acting Director of the Ecole, to intertwine their folds in a close embrace of international amity.

On the steps of the Musée des Antiques, immediately after the flagpole ceremonies, the Ecole presented to the Society of Beaux-Arts Architects a silken American flag to carry back with us. Kenneth Murchison delivered himself of a most sonorous speech of acceptance in French, which, somewhere later, had to be translated at sight back into English for the microphones of the recording newsreel, for American edification. Finally Julian Levi suavely announced the opening of our exhibition of students' drawings in the hall above, and we thronged upstairs to see how our American Beaux-Arts problems compared with the current work of the ateliers—and the comparison certainly showed nothing of which we need be ashamed.

Visits of inspection to the new National City Bank, a new theatre, and to the museum of old French hardware in the offices of Fontaine et Cie, rounded out a busy day.



Friday, June 5.—The scheduled event for to-day was a trip to Rheims by char-à-bancs, in which the main party attempted the difficult task of drinking its way back from the heart of the champagne country. Fred Hiron, Monroe Hewlett, Arthur Covey, Philip Ruxton, and I turned instead toward Beauvais and Amiens in a fast motor car, and were fortunate enough to find the latter cathedral nearly filled in the celebration of a

Confirmation Mass. The white-robed children, chanting their slow processional before the bishop and his priests, with a background of black-clad relatives, made a picture that none of us will ever forget.

Saturday, June 6.—A somewhat diminished party followed the regular schedule of a trip to Versailles to-day, many of us, who felt that one or two visits to Versailles in a lifetime were sufficient, staying behind in Paris to follow ways of our own devising. There are times when one wants to be alone in Paris, wandering about as he wills, revisiting old haunts, seeking out new treasures. Such a day was this one for me, looking once more into Notre Dame, St. Sulpice, the Sorbonne, St. Etienne du Mont, the bookstalls of the Odeon, the gardens of the Luxembourg, with a lazy hour under the trees, lulled by the patter of the Medici Fountain. Met Gelett and Mrs. Burgess dining at Michaud's. They have been abroad for six years, but will return home this fall.

This evening the whole party was reunited at the Folies Bergère, followed by a supper and dance at Noel Peter's in the Passage des Princes—and so far into the night.

Sunday, June 7.—Rain, lack of formal engagements, and an unquestioned need, combined to make this a day of rest.

Monday, June 8.—With Walter Thomas, Louis Jallade, George Lovatt, and Keith Schwinley, by motor to Chantilly, where, the chateau being closed, we had to be content with a view from outside; thence to Senlis and its cathedral; then on to Compiègne and to Pierrefonds, with its imposing fortified castle, destroyed by Richelieu, but restored by Viollet-le-duc under Napoleon III. Close inspection of the interior is rather disappointing, the restoration being cold and precise, and with a surprisingly crude use of color.

We were unfortunate in having picked a car with a new motor, and neither threat nor cajolery was efficacious in getting our chauffeur to exceed his limit of forty-five kilometers an hour. Hence we were disgracefully late for the magnificent dinner given the whole party in the permanent exhibition hall at the *Exposition Coloniale* by the *diplomé* architects of Paris. After the dinner we were entertained by a short Chinese play, by a troupe of children dancers from French Guiana, and by a dance of Annamites from the Sudan. Following our hosts, we entered the reproduction of Angkor Vat, the Exposition's most dramatic feature, and, under the guidance of the architect who reproduced it here, as well as formerly at Marseilles and at Barcelona, marvelled at the miles of intricate ornament so faithfully copied in stucco from the stone original.

NUMBER XV
IN A SERIES
OF
WORKING DRAWINGS
By Jack G. Stewart

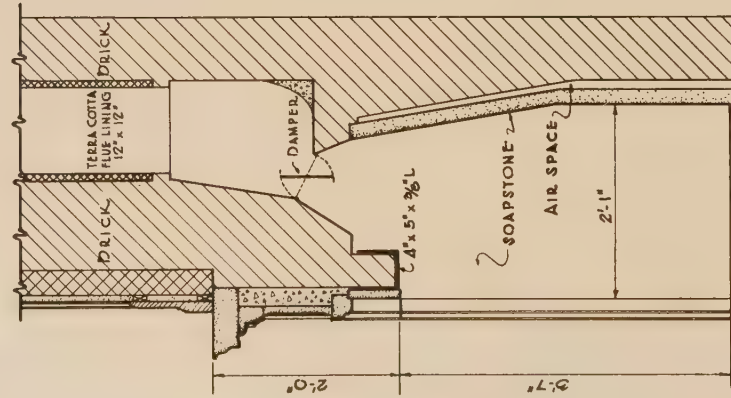
This series, in which one drawing will appear each month, is designed to cover the smaller practical problems that confront the architect in his day's work. The subjects chosen are those which, while not uncommon, call for some experience and knowledge of approved solutions. Next month the subject is a Bank Counter and Screen



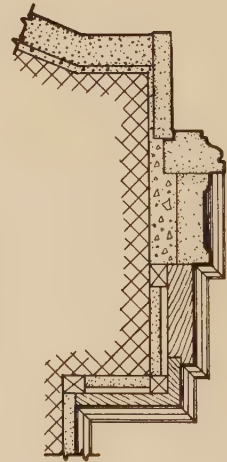
ARCHITECTURE
CHARLES SCRIBNER'S SONS

PREVIOUS SUBJECTS IN THIS SERIES

- I. FLAGPOLE HOLDER ON AN EXTERIOR WALL
- II. RADIATOR ENCLOSURES
- III. CIGAR SALES COUNTER
- IV. WOODWORK IN A LIBRARY
- V. BUILT-IN KITCHEN CUPBOARD
- VI. VARIOUS TRIMS AND MOULDINGS
- VII. TELEPHONE BOOTH
- VIII. MEN'S TOILET
- IX. WINDOW SPANDRELS
- X. CIRCULAR STAIR FOR A RESIDENCE
- XI. DETAIL OF METAL STAIR CONSTRUCTION
- XII. DETAIL OF ELEVATOR CONSTRUCTION
- XIII. DETAIL OF FOLDING PARTITION
- XIV. DETAIL OF COUNTER-WEIGHT SLIDE DOOR FOR DUMB-WAITER

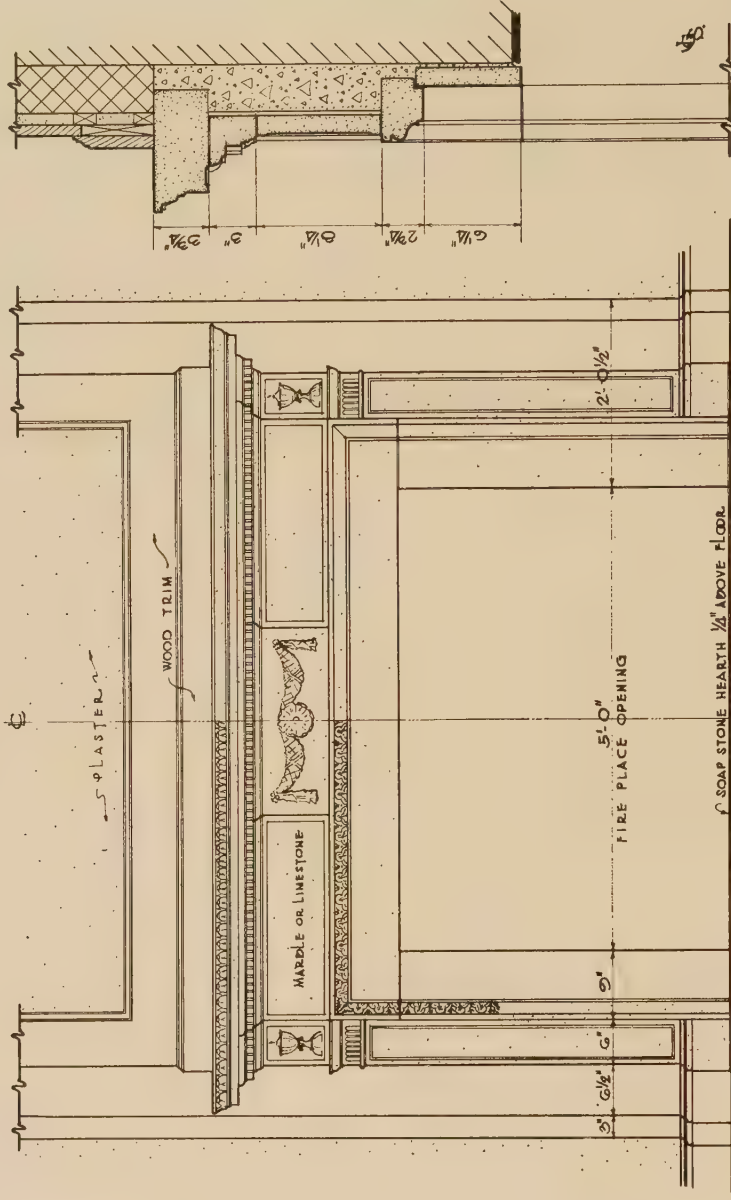


SECTION.



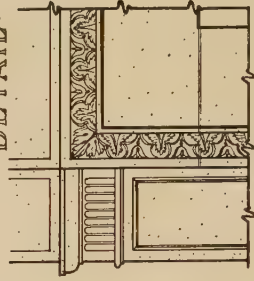
PLAN.

SCALE: 0' 5' 10' 0' 5'



ELEVATION.

DETAIL.



DETAIL.

SCALE DETAIL OF MANTEL.

CONTACTS

DEVOTED TO A BETTER UNDERSTANDING OF THE BUSINESS SIDE
OF ARCHITECTURE AND ITS RELATION TO THE INDUSTRIES



The Producers' Council Broadens Its Scope

A HIGH spot of the first day's proceedings, April 13, at the San Antonio Convention was the working relationship brought into view with the Associated General Contractors of America, the president of which, Mr. A. P. Greensfelder, and the heads of its various divisions and committees concerned with building construction, were all present at the joint afternoon session, and, with the president and other officials of the A. I. A., discussed with us the basis upon which our respective groups could co-operate.

Points discussed included the problems presented in the "or equal" clause of customary specifications; the presentation of an absent member's view in a written statement ably summarizing the manufacturer's position; the submission, by contractors, of subcontractors' names and proposed use of products, with their general bids; difficulties of this from the contractors' standpoint; the evils of unsoundly financed projects, and the assumption by architect, contractor, and producer of proper responsibility in their respective spheres.

The outcome has been a decision of the Institute to appoint a committee to work with the general contractor, and steps to be taken by the A. G. C. to form a corresponding section of that body to maintain contact with the Council and Institute, as the proposed "third leg" of the stool. Further steps will be the subject of a conference with A. G. C. officials in Washington at an early date.

This session developed some real meat for joint effort and Council service to members during the ensuing year. The "three-legged stool" upon which alone the solution of specific detail questions must rest has been brought into being, at any rate as a psychological fact. The

mental conviction upon the part of all three groups that this is a serious necessity is established. This large achievement is now recognized as the prerequisite to the particular solutions of detail questions which some may have hoped would be arrived at at this meeting.



An old house in Chartres, with a particularly lovely texture of brick nogging in the half-timber. Because of the narrow street the photograph had to be taken in two sections

The problem revealed proved larger than these in the laying first of the necessary foundation. That has been achieved. As one prominent industrial leader present remarked: "History is being made here. If our great business executives in industries not yet represented in this Council knew what it means, nothing could keep them out of it." There was similar evidence of serious appreciation in the comments of architects and the whole spirit of the A. I. A. Convention.

Tuesday, April 14, was given over to attending the A. I. A. sessions, at which the scope of the architect and government building programme were discussed. Listening in to the problems of the architect revealed much that is of moment to manufacturers' interests in both connections.

Wednesday, a high spot was the address delivered to the joint luncheon of the Institute and Council by Mr. Bennett Chapple (see July issue). Its result on public opinion with relation to support of the architectural and engineering professions and responsible industry should be very gratifying.

Wednesday's Council sessions were devoted chiefly to the discussion of recommendations made in the executive secretary's report relating to the co-ordination of research, action looking to the improvement of standard contract forms and the encouragement of Producers' Council clubs. This latter centred on what can be done to support and extend these, and provide for their representation by delegates at our annual meetings hereafter. Mr. G. R. Kingsland, president of the Producers' Council Club of Northern California, contributed greatly to clarifying the procedure which would make these clubs of inestimable value to Council membership.

Cast Stone in Building Codes

SUGGESTED SECTION FOR INCLUSION IN MUNICIPAL SPECIFICATIONS: IT CONCERNS STRENGTH, ABSORPTION, SAMPLING, AND TESTING

By Wal-Ward Harding, A.I.A.

ARCHITECTS, engineers, and specification writers of my acquaintance from time to time are called on, either in official capacities or as consultants, to co-operate in the modernization of municipal building codes. In recent months some of these men have asked my advice concerning strength, absorption, sampling, and testing of cast stone—that is, with reference to these matters in connection with building-code revisions.

So numerous were these requests for information on cast stone, which is a building stone moulded from especially prepared concrete in which the aggregate is selected for durability and appearance, that a suggested section for inclusion in building codes has been drafted. This, I believe, will interest other architects, engineers, and specification writers who may at some time or another have occasion to use it in connection with municipal and other work.

"The term *cast stone* as used in this code shall be understood to mean a building stone manufactured from portland cement concrete, precast and

used as trim or facing on or in buildings and other structures.

"Cast stone shall have an average minimum compressive strength at the age of twenty-eight (28) days, or when delivered on the job, of not less than five thousand (5,000) pounds per square inch and an average absorption of not more than seven (7) per cent of its dry weight.

"Samples from which test specimens will be cut shall be selected by the Commissioner of Buildings or his representative. In the event specimens fail to meet requirements in the first test the test may be repeated on a second set of specimens. At the direction of the Building Commissioner tests may be required for each additional ten thousand (10,000) cubic feet of stone delivered on the job. Tests shall be paid for by the manufacturer.

"Tests for compression and absorption for cast stone shall be made on three (3) two by two (2 by 2)

inch cylinders or two (2) inch cubes cut from the stone as delivered on the job or from the regular stock in the yard. If not homogeneous throughout, specimens of cast stone to be tested for absorption and compression shall be taken in such a manner that they are composed of approximately one-half ($\frac{1}{2}$) of facing and one-half ($\frac{1}{2}$) of backing material and so that they can be tested in the position in which the cast stone will be laid in the masonry. Compressive strength and absorption tests on cast-stone specimens shall be made in accordance with the American Concrete Institute tentative specification for cast stone (P-3-A-29T).

"No individual specimen used in the above prescribed tests shall vary more than ten (10) per cent below in compression nor more than ten (10) per cent above in absorption from the average requirements specified above. All cast stone shall be

branded with a permanent identification mark of the manufacturer, which shall be registered with the Commissioner of Buildings."



Way up on top of Muir Pass in the Sierras, at an elevation of something over twelve thousand feet above sea level, the Sierra Club has built the Muir Shelter Hut, which was designed by Henry H. Gutterson,

architect, of San Francisco, and built out of the granite on which it stands. Sand had to be carried nine miles on pack animals; water, two and a half miles; cement, a four-day trip



ARCHITECTURE'S PORTFOLIO OF BANK ENTRANCES

THE FIFTY-EIGHTH IN A SERIES OF COLLECTIONS
OF PHOTOGRAPHS ILLUSTRATING VARIOUS MINOR
ARCHITECTURAL DETAILS

*Forthcoming Portfolios will be devoted to the following subjects :
Urns (September), Window Grilles (October), China Cupboards
(November), Parapets (December), Concealed Radiators (January),
and Interior Clocks (February). Photographs showing interesting
examples under any of these headings will be welcomed
by the Editor, though it should be noted that these respective
issues are made up a month in advance of publication dates.*

Subjects of Previous Portfolios

1926-27

DORMER WINDOWS
SHUTTERS AND BLINDS
ENGLISH PANELLING
GEORGIAN STAIRWAYS
STONE MASONRY TEXTURES
ENGLISH CHIMNEYS
FANLIGHTS AND OVERDOORS
TEXTURES OF BRICKWORK
IRON RAILINGS
DOOR HARDWARE
PALLADIAN MOTIVES
GABLE ENDS
COLONIAL TOP-RAILINGS
CIRCULAR AND OVAL WINDOWS

1928

BUILT-IN BOOKCASES
CHIMNEY TOPS
DOOR HOODS
BAY WINDOWS
CUPOLAS
GARDEN GATES
STAIR ENDS
BALCONIES
GARDEN WALLS
ARCADES
PLASTER CEILINGS
CORNICES OF WOOD

1929

DOORWAY LIGHTING
ENGLISH FIREPLACES
GATE-POST TOPS
GARDEN STEPS
RAIN LEADER HEADS
GARDEN POOLS
QUOINS
INTERIOR PAVING
BELT COURSES
KEYSTONES
AIDS TO FENESTRATION
BALUSTRADES

1930

SPANDRELS
CHANCEL FURNITURE
BUSINESS BUILDING ENTRANCES
GARDEN SHELTERS
ELEVATOR DOORS
ENTRANCE PORCHES
PATIOS
TREILLAGE
FLAGPOLE HOLDERS
CASEMENT WINDOWS
FENCES OF WOOD
GOTHIC DOORWAYS

1931

BANKING-ROOM CHECK DESKS
SECOND-STORY PORCHES
TOWER CLOCKS
ALTARS
GARAGE DOORS
MAIL-CHUTE BOXES
WEATHER-VANES



*Bowery Savings Bank, New York City
York & Sawyer*



*Lawyers Title and Guaranty Company,
White Plains, N. Y. Andrew J. Thomas*



*First National Bank of Boston, Boston, Mass.
York & Sawyer*



*National Bank of Commerce, Philadelphia
Davis, Dunlap & Barney*



*City Bank Farmers Trust Company, New York City
Cross & Cross*



*Seamen's Bank for Savings, New York City
Benjamin W. Morris*

*Dime Savings Bank, Waterbury, Conn.
York & Sawyer*

*Federal Reserve Bank, New York City
York & Sawyer*





*Brooklyn Trust Company, Flatbush Branch
York & Sawyer*



*Palisades Trust & Guaranty Company,
Englewood, N. J. Aymar Embury II*



*The Fairhill Trust Company, Fairhill, Pa.
Davis, Dunlap & Barney*



*Mellon National Bank, Pittsburgh, Pa.
Trowbridge & Livingston and E. P. Mellon*



*Holmesburg Trust Company, Holmesburg, Pa.
Davis, Dunlap & Barney*

*The Ashland National Bank, Ashland, Ky.
Schenck & Williams*



*Holmesburg Trust Company, Holmesburg, Pa.
Davis, Dunlap & Barney*

*New York Trust Company, New York City
Cross & Cross*





*The Bloomfield Bank and Trust Company,
Bloomfield, N. J. Mowbray & Uffinger*

*Integrity Trust Company, Philadelphia
Paul P. Cret*



*City Bank Farmers Trust Company, New York City
Cross & Cross*

*The National City Bank of New York, Porto Rico
Walker & Gillette*





*Essex County Trust Company, East Orange, N. J.
Dennison & Hiron*

*The National City Bank of New York, Branch,
New York City. Walker & Gillette*



*Bankers Trust Company, Detroit, Mich.
Smith, Hinchman & Grylls*

*American Bank & Trust Company, New Orleans, La.
Moise H. Goldstein*





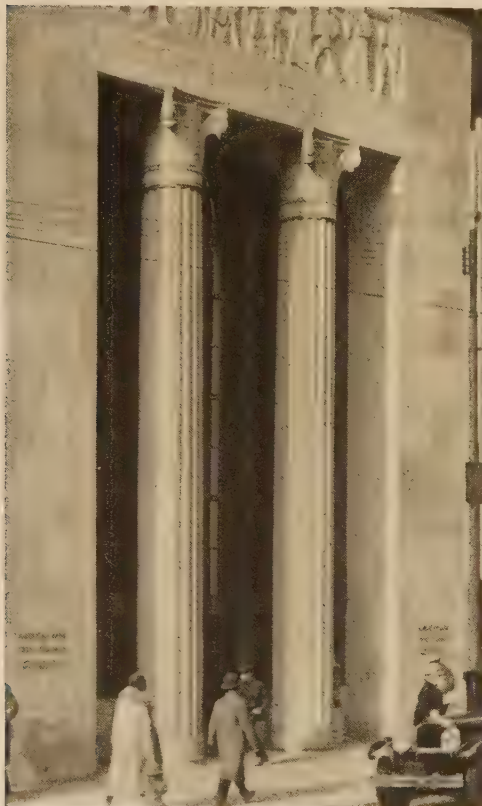
*Integrity Trust Company, Philadelphia
Paul P. Cret*



Grand Rapids Trust Company, Grand Rapids, Mich. Smith, Hinchman & Grylls

*American Bank & Trust Company,
Philadelphia. Davis, Dunlap & Barney*

*City National Bank, Huntington Park, Calif.
Harbin F. Hunter*





*Tenth National Bank, Philadelphia
Davis, Dunlap & Barney*



*Title Guarantee and Trust Company, New York City
John Mead Howells*

*Bank of America of California, Redlands, Calif.
Swasey & Hayne*

*E. W. Clark & Company, Philadelphia
Zantzinger, Borie & Medary*





*The Farmers' Loan and Trust Company Building,
New York City. Starrett & Van Vleck*

*Royal Bank of Canada, Montreal
York & Sawyer*



*Plaza Trust Company, New York City
Corbett, Harrison & MacMurray*

*Bank of Lee, Higginson & Company, New York City
Cross & Cross*





*Passaic National Bank and Trust Company,
Passaic, N. J. Harry Leslie Walker*

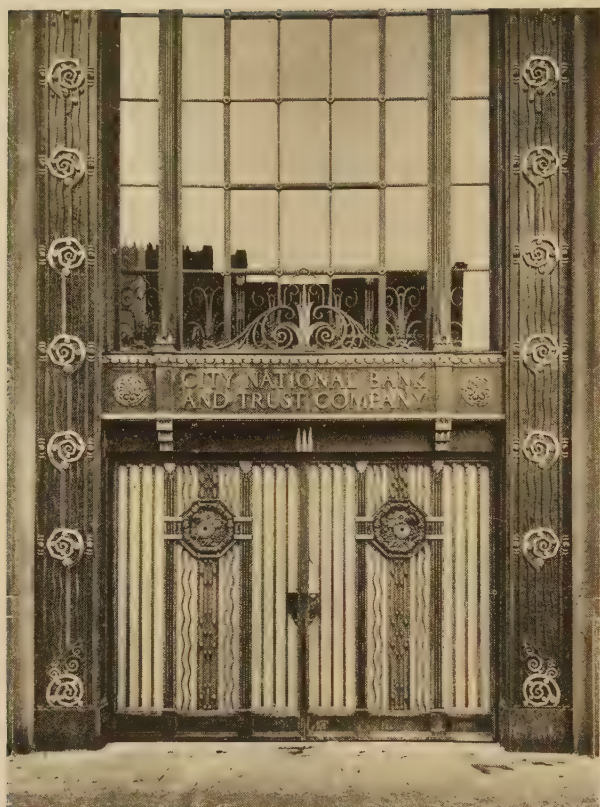
*Guaranty Trust Company, New York City
Cross & Cross*



*Chase National Bank, New York City
Graham, Anderson, Probst & White*

*Central Savings Bank, New York City
York & Sawyer*





*City National Bank and Trust Company,
Bridgeport, Conn. Dennison & Hiron*

*The Dime Savings Bank, Bensonhurst, Long Island
Halsey, McCormack & Helmer, Inc.*



*California Bank, Hollywood, Calif.
John and Donald B. Parkinson*

*The Savings Institution, Williamsport, Pa.
Godley & Sedgwick*





*San Jacinto Trust Company, Houston, Tex.
Joseph W. Northrop, Jr.*



*Irving Trust Company, New York City
Voorhees, Gmelin & Walker*

*Bank of New York and Trust Company,
New York City. Frank E. Newman*

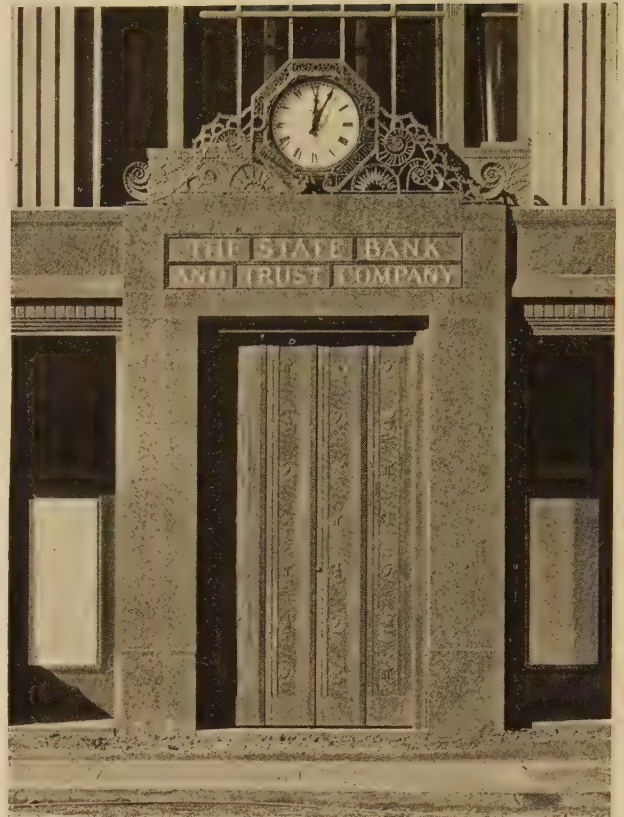
*The National City Company, New York City
McKim, Mead & White*





*Rhode Island Hospital Trust Company,
Providence, R. I. York & Sawyer*

*First National Bank, Azuza, Calif.
Robert H. Orr*



*The State Bank and Trust Company, New York City
Dennison & Hirons*

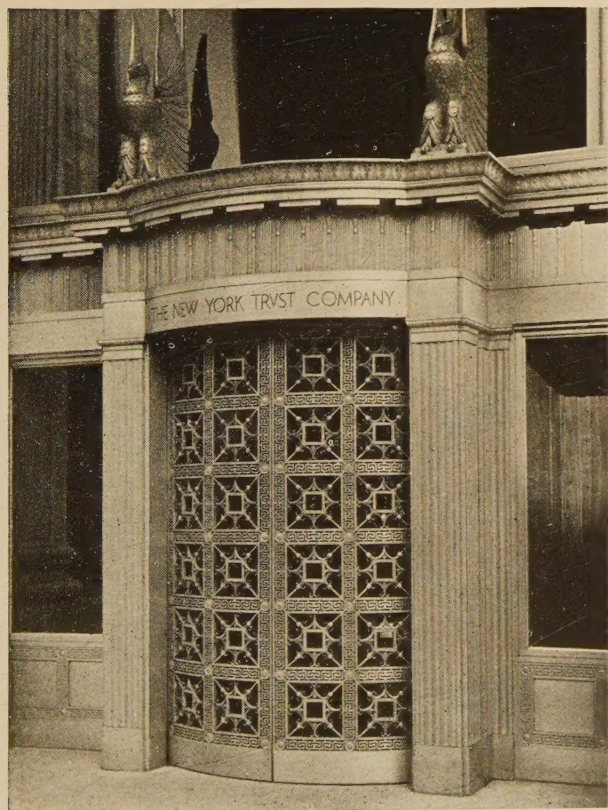
*City Bank Farmers Trust Company, New York City
Cross & Cross*





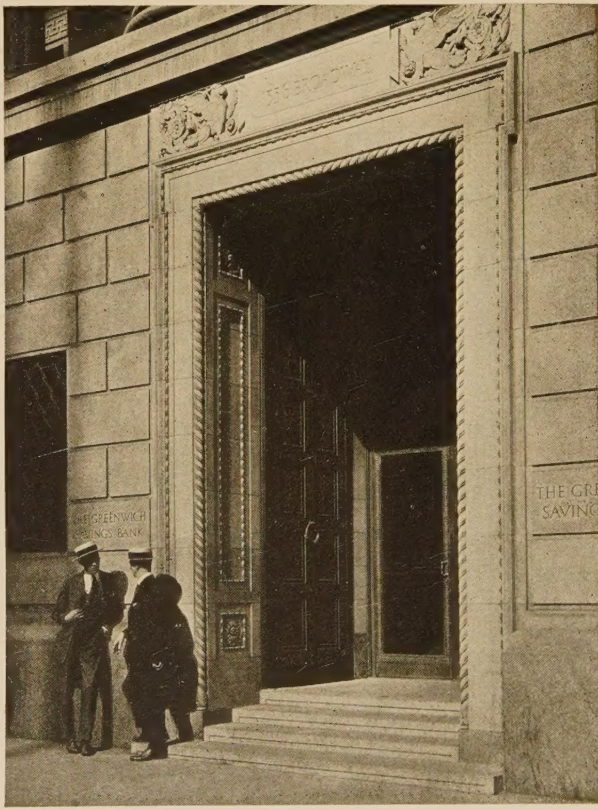
*Central National Bank, Mineola, Long Island
Frederic P. Wiedersum*

*The New York Trust Company, New York City
Cross & Cross*



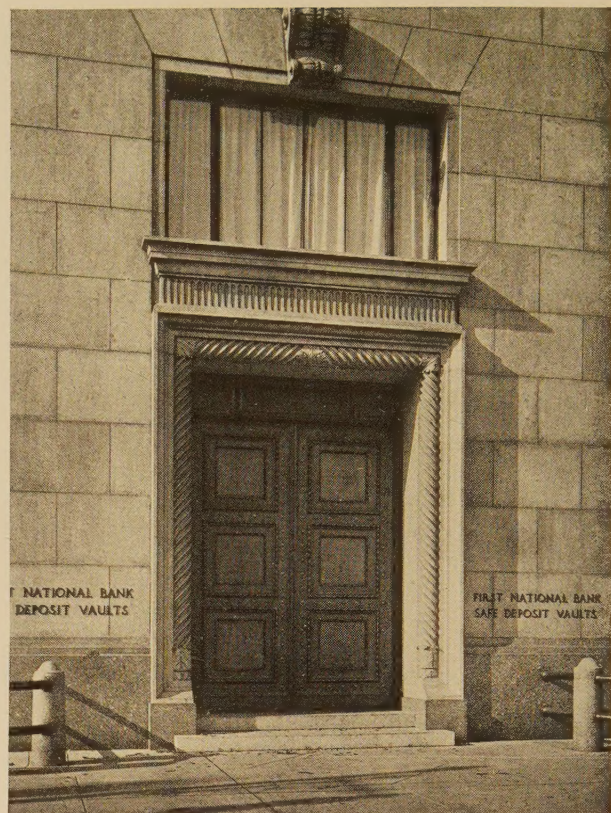
*The First National Bank and Trust Company,
Mamaroneck, N. Y. Office of John Russell Pope*

*The Greenwich Savings Bank, New York City
York & Sawyer*





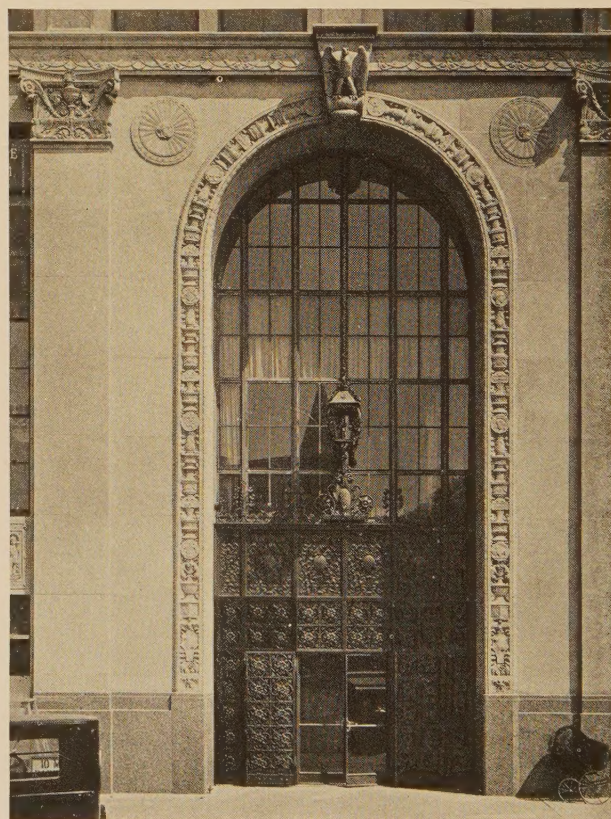
Union Dime Savings Bank, New York City
Alfred H. Taylor



First National Bank, Jersey City, N. J.
Alfred C. Bossom



First National Bank and Trust Company,
Hamilton, Ohio. Childs & Smith



State Bank and Trust Company, Evanston, Ill.
Childs & Smith



« ARCHITECTURE »

SACRE CŒUR, PARIS
From the etching by Donald M. Kirkpatrick